

# Science Laboratory Based Nutrition

## Lecturer: Van D Merkle DC, DCBCN, DABCI, CCN



### Fetterman Events Diamond Sponsors



**Cutting Edge Laser Technologies**, the world leader in light-based technologies for medical professionals, offers a full line of patented and clinically validated therapy lasers for the progressive practitioner. MLS® (Multi-Wave Locked System) Laser Therapy – a patented technology exclusive to Cutting Edge – is quickly becoming the standard of care for alleviating pain, reducing inflammation, and precipitating recovery.



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Science Based Nutrition

## Coming presentation:

Graduating soon or in the couple 2-3 years? Start planning now!!!

My presentation on tips and ideas will help guide you on getting started in practice and other plans for the future.

How to get other docs to want you in their business.

Pitfalls to avoid and save money.

Associate, independent contractor, buy a practice, even plan for retirement?

What to do now!!

The most important question. The most important thing to do.

A practical presentation on getting into practice even if you are on the other side and thinking of selling or getting an associate.



President and founder of  
Science Based Nutrition Inc.  
[www.ScienceBasedNutrition.com](http://www.ScienceBasedNutrition.com)

- Van D Merkle DC, DABCI, DCBCN, CCN
- Over 40 years in practice
- Been an associate 2 times
- Had 11 associates
- Current #1 associate for over 20 years, made over \$220,000 in 2023 & works just 25 hours a week seeing pts.
- Current #2 associate for over 11 years, made over \$180,000 in 2023 works just 25 hours a week seeing pts.



# **FETTERMAN AND SCIENCE BASED NUTRITION PRESENT: FOUNDATIONAL LABORATORY ANALYSIS LECTURE**

Van D. Merkle DC, DABCI, CCN, DCBCN

[www.ScienceBasedNutrition.com](http://www.ScienceBasedNutrition.com)



# THE DOCTOR OF the future...



...IS YOU!



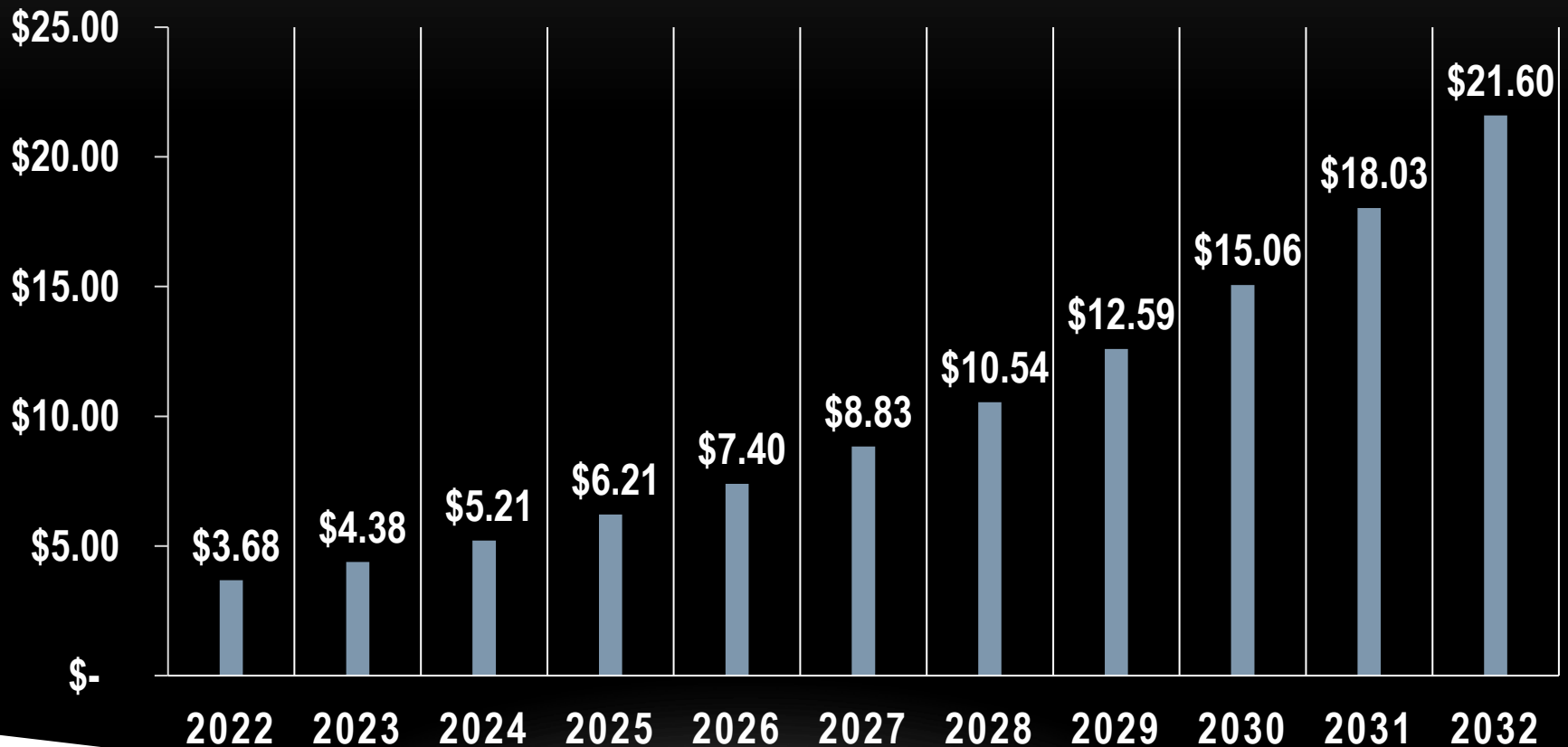
# VITAMIN SALES SKYROCKET IN THE PANDEMIC, BUT BUYER BEWARE [WWW.MEDSCAPE.COM](http://WWW.MEDSCAPE.COM)

- Mar 2, 2021 — The *supplement market*, valued at \$48 billion in 2019
- 2020 - \$52 Billion due to pandemic
- 2021 - \$58 Billion is projected for 2021
- 2021- \$193.5 Million spent on Chiropractic according to ACA
  - ACA Corporate report



# DIRECT TO CONSUMER LAB TESTING

- The global direct-to-consumer laboratory testing market size was valued at USD 3.68 billion in 2022 and is expected to hit around USD 21.6 billion by 2032 with a registered CAGR of 19.4% from 2022 to 2032.



# Beef Up Regulation on 'Wellness' Industry?

MedPage Today September 6, 2024

- The growth of the \$5.6 trillion global wellness industry has led to calls for greater government regulation of supplement makers and medical test companies

# Mirror, Mirror 2024: A Portrait of the Failing U.S. Health System

## Comparing Performance in 10 Nations

- **Abstract**
- **Goal:** Compare health system performance in 10 countries, including the United States, to glean insights for U.S. improvement.
- **Methods:** Analysis of 70 health system performance measures in five areas: access to care, care process, administrative efficiency, equity, and health outcomes.
- **Key Findings:** The top three countries are Australia, the Netherlands, and the United Kingdom, although differences in overall performance between most countries are relatively small. The only clear outlier is the U.S., where health system performance is dramatically lower.
- **Conclusion:** The U.S. continues to be in a class by itself in the underperformance of its health care sector.
- **Mirror, Mirror 2024** is the Commonwealth Fund's eighth report comparing the performance of health systems in selected countries. Since the first edition in 2004, our goal has remained the same: to highlight lessons from the experiences of these nations, with special attention to how they might inform health system improvement in the United States.



# MEDICAL DEBT IS KILLING OUR PATIENTS

— BY ARVIND VENKAT, MD SEPTEMBER 16, 2023 MEDSCAPE

- Americans owed at least \$195 billion in medical debt as of 2019,

- CHICAGO—January 16, 2019—More than 4 in 5 **American** adults (86 percent) **take vitamins or supplements**, according to a recent online survey conducted by The Harris Poll on behalf of the **American Osteopathic Association**. Jan 16, 2019

# CHICAGO, JAN. 16, 2019 /PRNEWSWIRE/ --

## NOTE: THIS WAS BEFORE THE PANDEMIC!

- More than 4 in 5 American adults (86 percent) take vitamins or supplements, according to a recent online survey conducted by The Harris Poll on behalf of the American Osteopathic Association.
- However, only about a quarter (24 percent) of those taking vitamins or supplements received **objective test results** indicating they have a nutritional deficiency.



# THE JOINT CHIROPRACTIC 6-14-2022

- Text:
- Join today and receive 4 visits for only \$45.00



# THE HARRIS POLL ON BEHALF OF THE AMERICAN OSTEOPATHIC ASSOCIATION. JAN 16, 2019

## Why people take vitamins:

- **Recommendations from a physician (51 percent)**
- Their own research, based on personal needs (39 percent)
- Recommendations from a friend or family member (22 percent)
- The survey also found 13 percent of Americans choose their vitamins or supplements based on what items interest them in stores
- 13 percent go off of recommendations from a trainer, exercise professional or nutritionist
- 6 percent base their choices on endorsements by celebrities or social media influencers



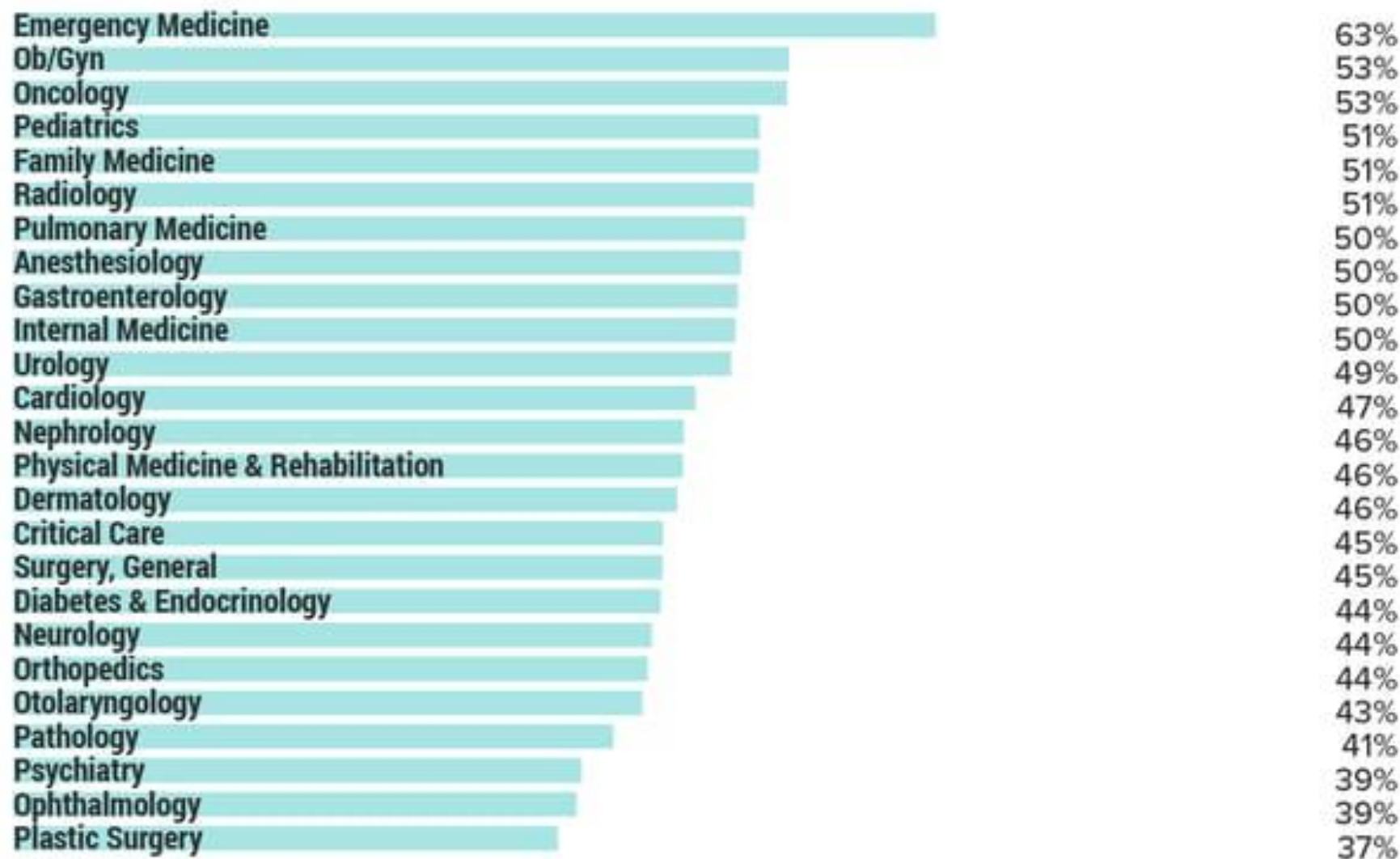
# MEDICAL PHYSICIANS SURVEY IN 2020

DYNAMIC CHIROPRACTIC JUNE 10, 2022

- **23.80 percent of medical physicians intended to leave their practice within 2 years**
- **31.4 percent intended to reduce their hours**
- **Quite possible that has gotten worse.**
- A recent survey of physicians published in *Mayo Clinic Proceedings* revealed that one-third of us plan to reduce our work hours in the next year, and 20% anticipate leaving our current practice within the next 2 years. **November 2022**



# Which Specialties Have the Greatest Burnout Rates?



*Not all specialties are shown.*



# ORTHOPEDIC SURGEONS ON TRACK TO EARN LESS THAN TACO BELL WORKERS

- — If current trends continue, patients are in big trouble
- by John Gever, Contributing Writer, MedPage Today February 14, 2024Share on X
- Share on LinkedIn. Opens in a new tab or window
- email article
- SAN FRANCISCO -- Declining reimbursements to surgeons under Medicare and private insurance for total joint replacement procedures are creating an untenable situation, researchers warned.
- Already, according to a study presented here at the **American Academy of Orthopaedic Surgeons' (AAOS) annual meeting**, hourly rates for early-career orthopedic surgeons performing hip replacements are about the same as for dentists and travel nurses. And the same group **projected that Medicare payments to physicians for hip replacement surgeries would drop below \$11 per hour if the current downward-accelerating trend continues.**
- That bodes poorly for older Americans, as demand for joint replacement procedures has been projected to surpass 1.5 million annually by 2030, compared with about 1 million prior to the COVID-19 pandemic. It's hard to imagine surgeons agreeing to keep working, let alone join the profession, at pay rates below those **currently earned by Taco Bell cashiers.** Something has to give.
- Adam Bruggeman, MD, chair of the AAOS's Advocacy Council and a solo-practice surgeon in San Antonio, told MedPage Today that Congress needs to address this crisis and soon.
- Medicare financing has long been problematic, he explained, in that it provides a fixed pot of money to pay for whatever comes along. "As more procedures are performed, or more patients need care, or more cases are moved out of the hospital into the surgery centers" -- which Medicare treats like individual physicians, whereas hospitals are reimbursed differently -- "we're doing more things in this one bucket, but that bucket has a finite amount of things it can pay for. So what ends up happening is that every year, we get a decrease [in reimbursement rates]. We've been unable to get Congress to tie our reimbursement to inflation."



# LEAVING 'THE HOUSE OF GOD'

MEDPAGE TODAY NOVEMBER 26, 2022

- — **Damaged doctors need to heal our broken hearts**
- by Elizabeth LaRusso, MD November 26, 2022
- 
- consider that **prepandemic, male and female physicians committed suicide at rates 40% and 130% higher than those of the general population.**
- 
- Comment: With 70% of doctors burn't out, it is no wonder that the **AMA, an organization that supposedly represents physicians in the US, reports that 155,000 physicians will quit in the next 2 years** (AMA <https://www.ama-assn.org/pr...>).
- John\_Hsu\_MD • We have gone from the top of the heap to the outhouse. We were the top of the class and we expected our opinions to be of value. Then **we lost self-autonomy. 70% of physicians employed**, meant that the top office was now held by administrators, nurses, pharmacists, EHR computer engineers, **government officials who now tell us what to do. Hospital administrators decide how the business is doing**



# MAJOR RN SHORTAGE

- 839 Registered Nurse (RN) Jobs available in Dayton, Ohio
- 2-27-2024
- [registered nurse jobs in dayton, oh - SimplyHired](#)
- 839 registered nurse jobs in **dayton**, oh



# MEDSCAPE APRIL 21, 2023

- A recent survey by Elsevier Health predicts that up to **75% of healthcare workers will leave the profession by 2025**. And a 2020 study conducted by the Association of American Medical Colleges (AAMC) **projected a shortfall of up to 139,000 physicians by 2033**.



# MD'S LEAVING, PHYSICIAN SHORTAGE

## MEDPAGE TODAY 2-1-2024

- Chronic disappointments, setbacks, and obstacles to putting patients first are contributing to a growing **physician shortage that is projected to swell to 124,000 by 2034**, according to the Association of American Medical Colleges.
- The downstream effects of seismic changes in healthcare include reports of patients losing their faith in the primary care system and in providers themselves. **The crisis of confidence affects not just doctors but nurses as well -- nurse job openings are expected to grow at a faster rate (9%)** than all other occupations through 2026.



# REFERENCE MATERIALS

- Laboratory Test Handbook 4<sup>th</sup> edition
- Text Book of Medical Physiology 5<sup>th</sup> edition Guyton
- The Merck Manual 15<sup>th</sup> edition
- Nutritional Influences on Illness 2<sup>nd</sup> edition Werbach
- Interpretation of Diagnostic Tests 6<sup>th</sup> edition Wallach
- A Textbook of Pathology 8<sup>th</sup> edition Lea & Febiger
- PDR for Herbal Medicines 2<sup>nd</sup> edition
- Dr. Cessna's Internal Diagnosis Courses and material
- PDR 55<sup>th</sup> (electronic) edition 2001
- PDR 56<sup>th</sup> edition 2002
- PDR Medical Dictionary 2<sup>nd</sup> edition
- Drug-Induced Nutrient Depletion Handbook 2<sup>nd</sup> edition Ross Pelton
- The Doctors' Vitamin and Mineral Encyclopedia Sheldon Saul Hendler, M.D., Ph.D
- Hepatitis A to G, Alan Berkman, MD and Nicholas Bakalar
- PDR for Nonprescription Drugs and Dietary Supplements 23<sup>rd</sup> edition 2002



# SUGGESTED REFERENCE MATERIAL IN GETTING STARTED WITH LABORATORY DIAGNOSTICS

- Laboratory Test Handbook
  - Mosby's Manual of Diagnostic and Laboratory Tests
  - [www.Labcorp.com](http://www.Labcorp.com)
- Advanced Nutrition and Metabolism, Gropper, et.al.
- Medical Dictionary
  - MedLine Plus:  
<http://www.nlm.nih.gov/medlineplus/mplusdictionary.html>
  - Merck Manual
  - Book or Internet: <http://www.merck.com/mmpe/index.html>
  - PDR
  - Book or [www.pdr.net](http://www.pdr.net)
  - ICDA Code Book
  - Book or <http://icd9cm.chrisendres.com/index.php>



# JUST A REGULAR PATIENT\*\*\*\*

Name: **KH20337**

Gender: **Male**

Age: **36**

Weight: **188**

Blood Type: **A**

Presented: **7/00**

- High cholesterol - 454 (up and down for four years)
- Triglycerides - over 800
- MD prescribed cholesterol medication
- No medications to date of testing
- Craves sugar, sodas, chocolate; no diabetes in family history
- Decreased sexual function
- Under care of a DC for injured neck
- Energy is mediocre
- Increased panic, anxiety and malaise
- Drinks 2-3 cans of caffeine-free Coke a day



## WHAT WOULD YOU DO NOW? \*\*\*\*\*

- The other DC was no good, he needs your special 'adjustment'
- "Not my problem, I only adjust subluxations. Let him take the cholesterol drug"
- Have him fill out a questionnaire to determine what special vitamin he needs
- Give him the vitamin company "special cholesterol lowering vitamin formula"
- Try out the NEW cholesterol lowering vitamin of the month
- Test him: muscle test, energy test, etc.
- Laboratory tests? Which ones?
- **Check his insurance?**

# Labcorp Results Form

\*\*\*\*\*

Specimen #	Type	Primary Lab	Report Status	LabCorp®	
324-472-8358-0	R	CB	1-0010 PG	03 01 (FINAL)	
TIME 1326	DOB: 11/10/50		11/21/01 16:25		
CD- 94295308874					
Patient Name	Sex	Age (Yr/Mo)	Account		
NORDAN, JOAN	F	051/00	VAN D. MERKLE, D.C. 34511202		
Patient Address		16			
00000-00000		16			
Date Collected	Date Entered	Date Reported	5761 FAR HILLS AVE.		
11/20/01	11/20/01	11/21/01	KETTERING, OH 45429-		
		0523	937-433-3241 OHN		
TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
<b>CMP12+LP+TP+7AC+CBC/D/P16+E...</b>					
<b>CHEMISTRIES</b>					
Glucose, Serum	79		mg/dL	65 - 109	CB
Hemoglobin A1c	5.4		%	4.5 - 5.7	CB
<p>(Factors such as duration of diabetes, adherence to therapy and the age of the patient should also be considered in assessing the degree of blood glucose control)</p> <p>The following ranges may be used for interpretation of results:  HgbA1c degree of glucose control:  &gt;8% Action suggested*  &lt;7% Goal of Diabetic Therapy**  &lt;6% Normal</p> <p>*High risk of developing long term complications such as retinopathy, nephropathy, neuropathy, cardiopathy, etc. **Some danger of hypoglycemic reaction in type I diabetics. Some glucose intolerant individuals and "sub-clinical" diabetics may demonstrate HgbA1c levels in this area.</p> <p>HgbA1c may be overestimated in diabetic patients exhibiting poor control and who are also heterozygous or homozygous for HgbS or HgbC. Total glycohemoglobin is a better indicator of diabetic control in patients with these hemoglobin variants.</p>					
Uric Acid, Serum	4.4		mg/dL	2.4 - 8.2	CB
BUN	8		mg/dL	5 - 26	CB
Creatinine, Serum	0.5		mg/dL	0.5 - 1.5	CB
BUN/Creatinine Ratio	16				
Sodium, Serum	136		mmol/L	135 - 148	CB
Potassium, Serum	3.9		mmol/L	3.5 - 5.5	CB
Chloride, Serum	102		mmol/L	96 - 109	CB
Magnesium, Serum	1.9		mg/dL	1.6 - 2.6	CB
Calcium, Serum	9.4		mg/dL	8.5 - 10.6	CB
Phosphorus, Serum	3.3		mg/dL	2.5 - 4.5	CB
Protein, Total, Serum	7.1		g/dL	6.0 - 8.5	CB
Albumin, Serum	3.6		g/dL	3.5 - 5.5	CB
Globulin, Total	3.5		g/dL	1.5 - 4.5	CB
<b>A/G Ratio</b>		1.0	<b>L</b>	<b>1.1 - 2.5</b>	
Bilirubin, Total	0.3		mg/dL	0.1 - 1.2	CB
Alkaline Phosphatase, Serum	102		IU/L	25 - 150	CB
Creatine Kinase, Total, Serum	59		U/L	24 - 173	CB
LDH	124		IU/L	100 - 250	CB
AST (SGOT)	15		IU/L	0 - 40	CB
ALT (SGPT)	8		IU/L	0 - 40	CB
GGT	17		IU/L	0 - 60	CB
<b>REPORT</b>					
©2000 Laboratory Corporation of America® Holdings All Rights Reserved PH 11/21/01					

\*\*\*\*

Name: **Kevin H.**

Gender: **Male**

Age: **36**

Weight: **188**





Blood Type: **A**

Test #: **1**

Test Description	Current Rating 07/31/2000	
Glucose	111.00	High
Hemoglobin A1C (Gly-Hgh)	5.10	*
Uric Acid	6.50	high
BUN (Blood Urea Nitrogen)	15.00	*
Creatinine	1.30	High
BUN / Creatinine Ratio	11.00	low
Sodium	141.00	*
Potassium	4.80	high
Chloride	103.00	*
Magnesium	2.30	*
Calcium	9.70	*
Phosphorus	2.90	low
Calcium/Albumin Ratio	2.20	*
Total Protein	7.30	*
Albumin	4.40	*
Globulin	2.90	*
A/G Ratio	1.50	*
Total Bilirubin	0.50	*
Alkaline Phosphatase 25-150	81.00	*
Creatine Kinase	1780.00	Very High
LDH	215.00	high
SGOT (AST)	69.00	High
SGPT (ALT)	50.00	High
GGT	32.00	*
Serum Iron	52.00	low
Ferritin	148.00	*
Total Cholesterol	440.00	Very High
Triglyceride	1450.00	Very High
HDL Cholesterol	38.00	low
Total Cholesterol / HDL Ratio	11.50	Very High
T4 Thyroxine	5.60	low
T3 Uptake	40.00	High
T7 Free Thyroxine Index (FTI)	2.20	low
CRP C-Reactive Protein	2.80	high
White Blood Count	6.90	*
Red Blood Count	4.56	*
Hemoglobin	15.20	high
Hematocrit	44.10	*
MCV	97.00	high
MCH	33.30	high
MCHC	34.40	high
Platelets	237.00	*
Polys/Neutrophils (SEGS-PMNS)	70.00	high
Lymphocytes	23.00	low
Monocytes	6.00	*
Eosinophils	1.00	*
Basophils	0.00	*
ESR-Erythrocyte Sed Rate, Westergren	26.00	High








Name: Kevin H.    Gender: Male    Age: 36 \*\*\*\*  
 Weight: 188    Blood Type: A    Test #: 1

Legend:  Warning  High Risk  Critical  Opt		
Test Description	Current Rating 07/31/2000	
Glucose	111.00	High
SGOT (AST)	69.00	High
SGPT (ALT)	50.00	High
GGT	32.00	*
Serum Iron	52.00	low
Ferritin	148.00	*
Total Cholesterol	440.00	Very High
Triglyceride	1450.00	Very High
Total Cholesterol / HDL Ratio	11.50	Very High
Creatine Kinase	1780.00	Very High
ESR-Erythrocyte Sed Rate, Westergren	26.00	High

\*\*\*\*














Name: Kevin H.  
Test #2 comparison  
to #1

Legend:  Warning  High Risk  Critical  Optimal  Improvement			
Test Description	Current Rating 09/28/2000	Prior 07/31/2000	Delta
Glucose	98.00 high	111.00	😊
Hemoglobin A1C (Gly-Hgh)	5.20 *	5.10	
Uric Acid	4.90 *	6.50	😊
BUN (Blood Urea Nitrogen)	18.00 *	15.00	
Creatinine	1.40 High	1.30	😞
BUN / Creatinine Ratio	12.00 low	11.00	😊
Sodium	141.00 *	141.00	
Potassium	4.40 *	4.80	😊
Chloride	103.00 *	103.00	
Magnesium	2.60 high	2.30	😞
Calcium	9.50 low	9.70	😞
Phosphorus	3.40 low	2.90	😊
Calcium/Albumin Ratio	1.98 Low	2.20	😞
Total Protein	7.60 *	7.30	
Albumin	4.80 high	4.40	😞
Globulin	2.80 low	2.90	😞
A/G Ratio	1.70 high	1.50	😞
Total Bilirubin	1.20 high	0.50	😞
Alkaline Phosphatase 25-150	67.00 *	81.00	
Creatine Kinase	282.00 High	1780.00	😊
LDH	175.00 high	215.00	😊
SGOT (AST)	32.00 high	69.00	😊
SGPT (ALT)	36.00 high	50.00	😊
GGT	19.00 low	32.00	😞
Serum Iron	77.00 low	52.00	😊
Ferritin	165.00 *	148.00	
Total Cholesterol	204.00 High	440.00	😊
Triglyceride	168.00 High	1450.00	😊
HDL Cholesterol	43.00 *	38.00	😊
VLDL Cholesterol	33.00 high	11.50	
LDL Cholesterol	127.00 High	5.60	
Total Cholesterol / HDL Ratio	4.70 high	40.00	😊
T4 Thyroxine	7.60 *	2.20	😊
T3 Uptake	35.00 high	2.80	😊
T7 Free Thyroxine Index (FTI)	2.60 low	6.90	😊
CRP C-Reactive Protein	1.40 *	4.56	😊
White Blood Count	5.40 *	15.20	
Red Blood Count	4.73 *	44.10	
Hemoglobin	15.40 high	97.00	😞
Hematocrit	45.70 *	33.30	
MCV	97.00 high	34.40	Ø
MCH	32.70 high	237.00	😊
MCHC	33.80 *	70.00	😊
Platelets	255.00 high	23.00	😞
Polys/Neutrophils (SEGS-PMNS)	53.00 low	6.00	😊
Lymphocytes	35.00 *	1.00	😊
Monocytes	9.00 high	0.00	😞
Eosinophils	2.00 *	26.00	
Basophils	1.00 *		
ESR-Erythrocyte Sed Rate, Westergren	21.00 High	26.00	😊



Name: Kevin H. Gender: Male Age: 36 \*\*\*\*

Weight: 188 Blood Type: A Test #: 2

Legend:  Warning  High Risk  Critical  Optimal  Improved				
Test Description	Current Rating 09/28/2000		Prior 07/31/2000	Delta
Glucose	98.00	high	111.00	
SGOT (AST)	32.00	high	69.00	
SGPT (ALT)	36.00	high	50.00	
Total Cholesterol	204.00	High	440.00	
Triglyceride	168.00	High	1450.00	
Total Cholesterol / HDL Ratio	4.70	high	11.50	
Creatine Kinase	282.00	High	1780.00	
ESR-Erythrocyte Sed Rate, Westergren	21.00	High	26.00	

- \* What would have been the probable outcome with cholesterol lowering drugs?
- \* Medication: crises management - did MD do his job?
- \* How much liver function can be left and have no symptoms?
- \* Essential vs. non essential
- \* Adjustments, therapy, lasers, decompression etc.
- \* A/A, PI, Insurance



# Kevin's Vitamin Recommendations \*\*\*\* and follow the Low Carb Diabetic Diet

## Personal Vitamin and Supplement Program For: Kevin H.

2 Month  
Supply

Vitamin or Supplement	Dosage Per Day	AM	MIDN	PM	BED	Bottles	Quantity	Price	Extended Price
1 B6 (Neuro-K-500)	500 mg.	1				1	100 @	\$20.05	\$20.05
2 Beta Carotene	25000 I.U.	1				1	250 @	\$19.70	\$19.70
3 Calcium MCHC	750 mg.	1	1	1		1	250 @	\$30.30	\$30.30
4 Chlorella Plus	500 mg.	1		1		2	90 @	\$14.55	\$29.10
5 Chromium Picol. - JR	200 mcg.	1				1	100 @	\$7.60	\$7.60
6 Desiccated Liver	3000 mg.	1		1		1	250 @	\$12.20	\$12.20
7 Energenics	4	2		2		1	270 @	\$34.50	\$34.50
8 Germanium	150 mg.	1				2	30 @	\$41.60	\$83.20
9 Magnesium Glycinate	400 mg.	2		2		1	240 @	\$31.00	\$31.00
10 MLK 1000 [EPA/DHA]	2000 mg.				2	2	100 @	\$12.80	\$25.60
11 Niacinamide	1000 mg.	1		1		2	100 @	\$7.30	\$14.60
12 Pantothenic Acid	250 mg.	1				1	100 @	\$11.85	\$11.85
13 Ultra Preventive III (Multiple)	2	1		1		1	180 @	\$24.30	\$24.30
14 Lauricidin	See Instructions Below					1	72 @	\$35.75	\$35.75
15 Vitamin D [5000 IU]	See Instructions Below					1	250 @	\$6.45	\$6.45

### Specialty / Instructions

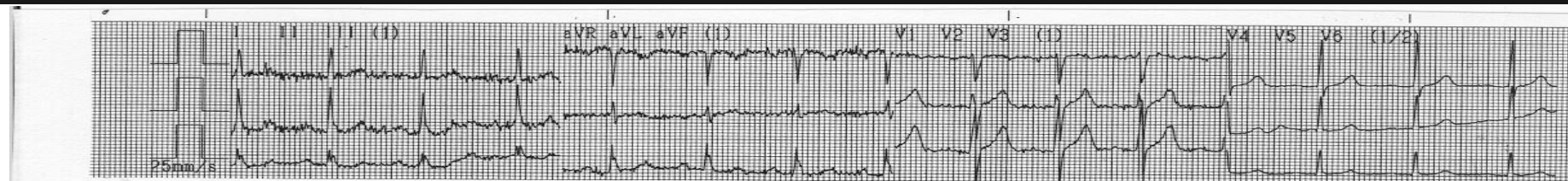
LAURICIDIN- Take 1.5 tsp per day

VITAMIN D- Take 1 every other day

Sub Total	\$386.20
Tax	\$27.03
<b>Total</b>	<b>\$415.17</b>



# Kevin - EKG 1 and EKG 2 \*\*\*\*



KH

Age: 48

7/28/00

3:25pm

Vent. Rate		87 bpm
PR	int.	180 ms
QRS	dur.	84 ms
QT/QTc	int.	336/381
P/QRS/T	axis	229/ 42/ 27
RV5/ SV1	amp	1.960/ 0.800 mV

## ANALYSIS RESULT

Atrial rhythm

**07/28/2000**

With occasional ectopic premature complexes

Nonspecific Twave abnormality

Nonspecific Twave abnormality

Possible left atria enlargement

**\*\* Abnormal rhythm ECG \*\*\***

ARTIFACT PRESENT

Vent. Rate		75 bpm
PR	int.	160 ms
QRS	dur.	96 ms
QT/QTc	int.	352/380 ms
P/QRS/T	axis	75/ 58/ 45
RV5/ SV1	amp.	1.810/ 0.920 mV

## ANALYSIS RESULT

Sinus rhythm

**\*\* normal ECG \*\***

ARTIFACT PRESENT

**POST**

**09/28/2000**

VAN MERKLE: **UPDATE ON ROCHELLE**

**REPLIED ON 2/23/24 AT 9:35 AM**

HANNAH, PLEASE SEE THAT ROCHELLE GETS THIS TODAY. VAN

- Rochelle, your **CA 27.29 was 79.60 on 1-12-2024. you sent a note that chemo was recommended due to the cancer being stage 4.**
- If you remember back in **2007: The Ca 27.29 was 185.70 on 5-4-2007**. At 185.70, the cancer was at least stage 3 but likely stage 4. Remember **that 3 out of 3 lymph nodes were positive on the lumpectomy in May of 2007?** You started your diet and nutritional program and the CA 27.29 dropped to 140 in 2 weeks (5-18-2007): wow, a 45 unit drop in 2 weeks all without chemo or radiation!
- By 6-7-2007 (just 1 month) the CA 27.29 dropped to 78.80 and then on 8-3-2007 (3 months) it was down to 35.50 and it went lower over the next few months.
- Chemo and radiation were recommended at that time but you changed your diet, took the recommended nutrients and your body got healthier and the cancer went into remission.
- It is very likely that if you did the prescribed chemo and radiation at that time that you would not be here today. Really, it was amazing what you did in 2007 to get your body healthy and how your system responded.
- Your case has been an inspiration for hundreds of other people with various cancers and even women with numbers higher and worse than yours have improved/gone into remissions without chemo or radiation. Really, can you do it again?
- With chemo and radiation, the cancer will return but your immune system will be damaged from those treatments. Breast cancer is still the second leading cause of cancer death, even with new cancer drugs and protocols.
- **I'm not saying that trying the diet and nutrition will work as good as in 2007 but maybe it will. You will know in a couple of weeks if it is working. I'm not saying to never take chemo and radiation but if you delayed a couple of weeks, would that really matter at stage 4?**
- We are here to help. Sincerely, Van D Merkle DC



- Rochelle replied on 2/23/24 at 10:54 AM
- Dear Dr, Merkle,
- I am so happy to have you in my life all of these years. Family and friends thought I was crazy but with your help they were proven wrong.
- I would like to continue with your help to keep my body strong and healthy. I know that Chemo will not only destroy the cancer cells but healthy cells. I can follow your recommended protocol to get me started right away. My body will be strong and I will not continue on with radiation or anything else they might recommend.
- What do you think?
- Appreciate you!
- Rochelle



- van merkle
- replied on 2/23/24 at 2:41 PM
- Rochelle,
- It is so good to hear from you and you have a great attitude. Let's get started, let's check everything to make sure there is nothing that is impairing your immune system like heavy metals, deficiencies etc.
- start the cat 1 diet and vitamin protocol. I would like you to get a current blood test and CA 27.29 so that we know where you are now.
- as soon as results are in, let's get together and have a talk.
- Sincerely,
- Van D Merkle DC



# APRIL 2007, STAGE 4 BREAST CANCER WAS DIAGNOSED IN A 48 YEAR OLD FEMALE

## COMPLETE CASE STUDY AND MP3 RADIO SHOW AT WWW.SCIENCEBASEDNUTRITION.COM

CA 27.29 for the patient below with Breast Cancer.

- 05-04-2007 185 Medical clinical range is 0-38.60.
- 05-18-2007 140 2 weeks on her nutritional program
- 06-07-2007 78.80 4 weeks on her nutritional program
- 08-03-2007 35.50 All without any medical drugs, chemo, radiation or hormone therapy.

• 08-17-2007 29.70 **Total Cost: Out of Pocket to date was \$3,000.00**

• MAKE \$3,000.00?) (HOW MANY ADJUSTMENTS, THERAPY ETC. WOULD IT TAKE FOR YOU TO

- Biopsy/surgery was immediately recommended but she came to me before the first biopsy/surgery.
- 5-4-2007 CA27.29 was 185, this level of CA 27.29 indicates that the cancer has already metastasized, (she started on her complete program after the blood and hair and DMSA urinary challenge tests were done).
- 5-11-2007 CA 27.29 reduced to 140 (this was before ANY medical intervention- no surgery/biopsy, chemo, radiation or hormone therapy).
- 5-24-2007 Patient had lumpectomy and 3 out of three lymph nodes were positive, (I was pretty sure that it would be). Radiation was immediately recommended daily for 6 weeks followed with chemo and was told that she would probably have 8-10 years to live, which the oncologist thought was pretty good, (she didn't think that was such a great deal for a 48 y/o).
- This is far less than the CoPay of conventional cancer treatment for Chemo and/or radiation.
- PET scan showed a small lesion on Right lung/liver area in 2007; Pet was negative in 2008.



**April 2007, Breast Cancer was diagnosed in a 48 year old female.**

**Complete Case Study and MP3 radio show at [www.ScienceBasedNutrition.com](http://www.ScienceBasedNutrition.com)**

CA 27.29 for the patient below with Breast Cancer.

- 05-04-2007 185 Medical clinical range is 0-38.60.
- 05-18-2007 140 2 weeks on her nutritional program
- **9-5-2018 20.90 Still no hormones, chemo or radiation!**
- **3-23-2019 32.30 Note: July 2018 a small aneurysm in the brain was found and causing mini seizures. Started Amlodipine/Valsartan and CBD for seizures and Lisinopril for hypertension.**
- **5-11-2019 26.40 after modified diet and vitamins !!!!!!!**

### **CA 27.29**

- **3-7-2020 31.70**
- **10-27-2020 30.300**
- **6-18-2021 41.50**
- **1-19-2022 34.00**
- **6-2022 48.70 Patient said they stopped the vitamins this year and reduced them the last year.**
- **11-20-2022 38.20**

- **As of 1-2022 patient is 63 yr/o and has no side effects of chemo or radiation or surgery...BECAUSE SHE HASN'T DONE ANY OF THOSE!!!**
  - **Cancer is not cured but is stable or in remission for 15+ years!**
  - **MOST IMPORTANT- SHE HAS CONTROL**





Test Description	Current Rating 06/03/2008	
------------------	------------------------------	--

Toxic Elements		
Aluminum	28.00	Very High
Antimony	0.01	*
Arsenic	0.07	high
Barium	3.70	High
Beryllium	0.01	*
Bismuth	0.33	*
Cadmium	0.09	Very High
Lead	0.20	*
Mercury	0.19	*
Platinum	0.01	High
Thallium	0.00	*
Thorium	0.00	*
Uranium	0.01	*
Nickel	0.18	*
Silver	0.06	high
Tin	0.07	*
Titanium	1.50	High
Total Toxic Representation	3.00	High

Essential Elements		
Calcium	1210.00	high
Magnesium	290.00	High
Sodium	570.00	High
Potassium	230.00	Very High
Copper	7.20	Very Low
Zinc	130.00	Low
Manganese	0.13	Low
Chromium	0.33	Low
Vanadium	0.01	Low
Molybdenum	0.07	*
Boron	6.10	High

## BREAST CANCER CASE CONTINUED...

Test Description	Date:	Current Result	Current Rating	Prior Result 05/12/2007
Agent		DMSA		Pre-Chall
Dose		1000 mg		
Interval		6		6
Toxic Elements				
Aluminum (UA)		0.00	Opt	53.00
Antimony (UA)		0.00	Opt	0.20
Arsenic (UA)		34.00	Opt	42.00
Beryllium (UA)		0.00	Opt	0.00
Bismuth (UA)		0.00	Opt	0.00
Cadmium (UA)		0.80	Opt	0.40
Lead (UA)		62.00	HI	1.10
Mercury (UA)		9.70	HI	1.80
Nickel (UA)		1.00	Opt	7.70
Platinum (UA)		0.00	Opt	0.00
Thallium (UA)		0.20	Opt	0.08
Thorium (UA)		0.00	Opt	0.00
Tin (UA)		3.30	Opt	0.00
Tungsten (UA)		0.00	Opt	0.00
Uranium (UA)		0.00	Opt	0.00





# WHAT ARE MY CHANCES OF GETTING CANCER?

ACCORDING TO 2020 DATA FROM THE AMERICAN CANCER SOCIETY

- Men have a 40.14 percent—or approximately **one in two**—chance of developing cancer in their lifetime. The greatest risk is prostate cancer.
- Women, 38.7 percent, or a **one in three** chance. The greatest risk is Breast Cancer
- **What are my odds of dying from cancer?**
  - Men have a 21.34 percent lifetime risk of dying from cancer.
  - Women around 18.33 percent lifetime risk of dying from cancer.
- Data suggests that new cancer diagnoses will grow to 27.5 million by 2040, the odds of survival are getting better.
- **According to the National Cancer Institute, the five-year survival rate from 2009 to 2015 in America was 67.1 percent.**
- **EARLY DETECTION BUT THE END RESULT IS STILL THE SAME**



## Gen X, millennials more likely to get cancer, new study shows AXIOS: Jul 31, 2024 – Health

- A sweeping new study is widening the lens on a **puzzling uptick in a range of cancers occurring among younger generations of patients.**
- Why it matters: It's the latest evidence that the burden of cancer could rise in the future despite major advances in treatment and prevention.
- The study from the **American Cancer Society found adults in their 30s, 40s and 50s are more likely than previous generations were to develop 17 different types of cancers**, including breast, liver and pancreatic cancers.
- Previous research has indicated alarming increases in certain cancers among younger adults, such as colorectal cancer.
- A National Cancer Institute study published in June concluded Gen Xers were more likely to be diagnosed with cancer as they aged than previous generations, [NPR reported in June](#).
- What they're saying: "It's really sort of scary to see all in one dataset," said Andrea Cercek, co-director of the
- What they found: The study used data from 23.7 million patients dating back to 1920 through 1990. Of 34 cancers examined, half had increased incidence among younger adults, according to the study published Wednesday in *The Lancet*.
- Incidence of eight different cancers increased with each successive age cohort after 1920.
- In particular, **adults born in the 1990 cohort were two or three times more likely to get cancers of the small intestines, kidney and pancreas (as well as the liver and bile duct in women) compared with those in born in the 1955 cohort at the same age.**
- Zoom in: In the case of five cancers — liver and endometrial in females, as well as gallbladder, testicular, and colorectal cancers — **young adults were more likely to die compared with prior generations.**

# SWEDISH STUDY AND LONGEVITY OVER 100 YR/O

Bio markers and health, living to age 100.

The global number of centenarians—individuals who survive at least to their 100th birthday—has roughly doubled every decade since 1950 and is projected to quintuple between 2022 and 2050 [

Participants in the population-based AMORIS cohort with information on blood-based biomarkers measured during 1985–1996 were followed in Swedish register data for up to 35 years. We examined bio[1]markers of metabolism, inflammation, liver, renal, anemia, and nutritional status using descriptive statistics, logistic regression, and cluster analysis. In total, **1224 participants (84.6% females)** lived to their 100th birth[1]day.

The final study population consisted of 44,636 participants followed from their first blood measurement until their date of death. Of these, 1224 individuals (2.7%) reached their 100th birthday, comprising the centenarian population. This proportion is very similar to the chance of reaching 100 in the general population of Stockholm in the same time period

Those reaching 100 years:

Higher levels of total cholesterol and iron

And lower levels of: glucose, creatinine, uric acid, aspartate aminotransferase (SGOT), gamma-glutamyl transferase, alkaline phosphatase, lactate dehydrogenase, and total iron-binding capacity.

VAN: There are additional tests that I would add due to living in the USA>



# CA 27.29 DROPPED 10 POINTS IN ONE MONTH!

10-31-2017

Tests results for Brenda Exxxxx,

Dear Brenda,

The test results are easy to see from the report.

**The CA 27.29 dropped to 30.20 from 40.80 just one month ago (on 9-25-2017)...very good!**

Don't change a thing. Stay on the same diet and vitamins.

Retest the CA 27.29 in 3 months and the complete blood and ca 27.29 in 6 months.

Sincerely, Van D Merkle DC



# BREAST CANCER

## 55 YR/O FEMALE

11-2022

- 10-21-2022 CA 27.29 152.80 Extreme High; Ferritin 371
- 11-11-2022 CA 27.29 23.40 mild high Ferritin 307

## CHIEF COMPLAINT:

## STAGE 4 CANCER OF THE OMENTUM - END STAGE (ABDOMINAL LINING) - DR. DYER

Test Description	3/6/2019	5/13/2019	8/20/2019	Healthy
CA 125	315.70 Very High	123.20 Very High	37.10 High	0.00 - 18.00
CA 15-3	29.00 High	25.40 High	19.40 High	0.00 - 15.00
CEA	114.20 Very High	26.80 Very High	3.00 High	0.00 - 2.00

This 79 year old patient is now getting to meet her great grandkids this summer as we have helped her reverse the course of a very significant disease i.e. cancer of the omentum or abdominal lining. Scans show that there was also involvement in distal organs including lymph node enlargement in the anterior cardio-phrenic and pericardial regions as well as gastro-hepatic ligament, concerning for nodal metastasis. This lymph node involvement is scary for sure and due to location the heart and liver regions will be key areas of monitoring as this case progresses/regresses.

The tumor markers CA 125, CA 15-3 and CEA have all improved dramatically. CA125 (female organ cancers) is down over 285 points to a nearly optimal level, CA15-3 (liver) is down 10 points and CEA (gut related cancers) is down 111 points. These values started off as CODE BLUE values meaning emergency levels. They have now regained nearly optimal status.

She and her kids relayed to me during a follow-up appointment that after 2 weeks on the program she no longer had to go to her MD to have fluid drained (ascites) from her abdomen. They had previously been taking 1-1.5L of fluid off of her belly multiple times per week. After 2 months on the program and following a very strict diet and vitamin/supplement plan she was down 75-80 lbs. Much of it was by clearing up the fluid issues

UPDATE: 1-14-2020 CA 125 24.60 and CA 15-3 18.20

UPDATE: 7-15-2020 CA 125 22.10 and CA 15-3 15.70

Herbert H.

## AGE related Complaints? His MD said: 'Just getting older'

July 2010 63 y/o Male 5'6" 175 lbs

### Primary Complaints:

1. High Blood Pressure
2. High Cholesterol
3. Gastro/Intestinal Dysfunction
4. Anemia
5. ED
6. Mild Fatigue
7. Headaches

### Medications:

Aspirin +2 years  
Simvastatin +2 years  
Lisinopril +2 years

A DMSA urinary challenge was  
ran on this patient because  
nearly all of the toxic elements  
in his hair results were yellow  
or clear/optimal.

## Hair Test Results

Legend: <div><div></div> Warning</div> <div><div></div> High Risk</div> <div><div></div> Critical</div>		
Test Description	Current Rating 07/21/2010	
Toxic Elements		
Aluminum	2.10	★
Antimony	0.02	★
Arsenic	0.03	★
Barium	0.10	★
Beryllium	0.01	★
Bismuth	0.03	★
Cadmium	0.04	high
Lead	0.78	high
Mercury	0.44	★
Platinum	0.00	★
Thallium	0.00	★
Thorium	0.00	★
Uranium	0.13	High
Nickel	0.05	★
Silver	0.03	★
Tin	0.04	★
Titanium	0.38	★
Essential Elements		
Calcium	202.00	low
Magnesium	110.00	High
Sodium	110.00	★
Potassium	16.00	low
Copper	67.00	Very High
Zinc	200.00	high
Manganese	0.32	★
Chromium	0.48	low
Vanadium	0.03	low
Molybdenum	0.03	low
Boron	0.39	Low
Iodine	0.36	low
Lithium	0.01	Low
Phosphorus	182.00	★
Selenium	0.88	★
Strontium	0.18	Low
Sulfur	48100.00	high
Cobalt	0.05	High
Iron	13.00	★
Germanium	0.04	★
Rubidium	0.02	low
Zirconium	0.03	Low

## Blood Test Results

Legend: <span>Warning</span> <span>High Risk</span> <span>Critical</span> <span>★ Optimal</span> <span>⊖</span>			
Test Description	Current Rating 07/23/2010		Prior 11/30/2009
Glucose	89.00	★	
Hemoglobin A1C (Gly-Hgh)	6.00	High	
Uric Acid	6.60	high	
BUN (Blood Urea Nitrogen)	21.00	high	
Creatinine	1.02	★	
GFR EST (Glomerular Filtration Rate)	59.00	★	
BUN / Creatinine Ratio	21.00	high	
Sodium	140.00	★	
Potassium	4.30	★	
Chloride	100.00	low	
Magnesium	2.50	★	
Calcium	10.00	high	
Phosphorus	2.80	low	
Total Protein	7.60	★	
Albumin	4.90	High	
Globulin	2.70	low	
A/G Ratio	1.80	high	
Total Bilirubin	1.10	high	
Alk. Phosphatase 25-530	97.00	★	
Creatine Kinase	164.00	high	
LDH	174.00	high	
SGOT (AST)	32.00	high	
SGPT (ALT)	50.00	High	
GGT	29.00	★	
Serum Iron	131.00	high	
Ferritin	472.00	High	
Total Cholesterol	182.00	high	186.00
Triglyceride	70.00	low	80.00
HDL Cholesterol	47.00	★	44.00
VLDL Cholesterol	14.00	★	16.00
LDL Cholesterol	121.00	High	126.00
Total Cholesterol / HDL Ratio	3.90	★	4.23
TSH	1.87	★	
T4 Thyroxine	10.00	high	
T3 Uptake	30.00	★	
T7 Free Thyroxine Index (FTI)	3.00	★	
CRP C-Reactive Protein	0.70	★	
White Blood Count	6.80	★	
Red Blood Count	5.16	★	
Hemoglobin	16.90	high	
Hematocrit	46.40	★	
MCV	90.00	★	
MCH	32.80	high	
MCHC	36.40	High	
RDW	13.10	★	
Platelets	292.00	high	
Polys/Neutrophils (SEGS-PMNS)	65.00	high	
Lymphocytes	26.00	★	
Monocytes	7.00	high	
Eosinophils	2.00	★	
Basophils	0.00	★	
Neutrophils/Polys (Absolute)	4.40	★	
Lymphs (Absolute)	1.80	low	
Monocytes (Absolute)	0.50	★	
Eosinophils (Absolute)	0.10	★	
Basophils (Absolute)	0.00	★	
ESR-Erythrocyte Sed Rate, Westergren	2.00	★	
Vitamin D 25-Hydroxy	21.00	Very Low	

# Herbert H. Chelation Tests

Legend: <span style="display: inline-block; width: 15px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></span> Warning <span style="display: inline-block; width: 15px; height: 15px; background-color: red; border: 1px solid black; margin-right: 5px;"></span> High Risk <span style="display: inline-block; width: 15px; height: 15px; background-color: blue; border: 1px solid black; margin-right: 5px;"></span> Critical <span style="display: inline-block; width: 15px; height: 15px; background-color: green; border: 1px solid black; margin-right: 5px;"></span> Optimal <span style="display: inline-block; width: 15px; height: 15px; background-color: lightgreen; border: 1px solid black; margin-right: 5px;"></span> Im			
Test Description	Prior	Delta	
Agent	7/24/2010		
Dose	Pre-Challen		
Interval			
<b>Toxic Elements</b>			
Aluminum (UA)	3.10		
Antimony (UA)	0.00		
Arsenic (UA)	6.40		
Barium (UA)	2.50		
Beryllium (UA)	0.00		
Bismuth (UA)	0.00		
Cadmium (UA)	0.30		
Cesium (UA)	3.50		
Gadolinium (UA)	0.00		
Lead (UA)	0.50		☹
Mercury (UA)	1.30		☹
Nickel (UA)	2.50		
Palladium (UA)	0.00		
Platinum (UA)	0.00		
Tellurium (UA)	0.00		
Thallium (UA)	0.20		
Thorium (UA)	0.00		
Tin (UA)	2.30		
Tungsten (UA)	0.00		
Uranium (UA)	0.00		



# IMPORTANT QUESTION?

- What were Herbert's **real** problems?
- What are symptoms of the **real** problem?
- Would **functional tests** have been positive in urine or saliva?
- Adrenal function? Would patient 'feel' better on adrenal support?
- Hormones: Cortisol? Testosterone? DHEA? Testosterone? Growth Hormone?
- Amino Acids?
- Fatty Acids?
- Neurotransmitters?
- Urine Organic Acids?
- **Microbiome? SIBO? Candida?**
- Digestion: food allergies? gluten sensitivities?
- Psychological/mental impact of toxic elements?
- **Muscle Testing?**

# DIAGNOSIS/TREATMENT AND LIABILITY/MALPRACTICE

- **Diagnosis:** to diagnose or identify something-Exam, x-ray, questionnaire, energy techniques, muscle testing  
= Legal obligation
- **Treatment:** adjustment, therapy, vitamins, energy technique, verbal recommendations  
= legal responsible and liability
- If you treat something...you are legally responsible/liable

# “YOUR SCIENCE BASED NUTRITION PROGRAM SAVED MY LIFE AND MY PRACTICE”

6-18-2018

Dr. Merkle,

In short, in 2015 your Science Based Nutrition program saved my life AND my practice. I have a 3 minute video on my website that explains my story [at www.FortWayneChiro.com](http://www.FortWayneChiro.com) . The video will automatically load.

My chronic pain story: I became a chiropractor in 2005, due to adjusting and haven taken antibiotics (for minor acne) for 15 straight years-(which tore down my gut and my body could not heal) my SC joints were surgically removed in 2009, I suffered a severe whiplash injury in 2008 which led to 7 years of pain meds-Oxycontin, Percocet, Cymbalta, Valium, Neurontin, etc, all at the same time, 18 neck injections, visits to Cleveland clinic, 9 neck MRI's, failed NK surgery in 2014. I was questioning life. I am a born again Christian but this really tested my faith to say the least. Finally in 2015 I received a SBN flier, didn't think it would help. I **attended one of your seminars in Chicago, half alive taking many many meds.** I also attended your homecoming wkend seminar/party, touring your office in 2015. After the initial report **I WAS 100% PAIN FREE IN 2 WEEKS!!**

**So within 6 months I was able to completely get off ALL of my pain medications. And today I am 100% medication free.** I have taken many patients through SBN reporting but my case was truly a miracle. M.D. after M.D. told me I would struggle with chronic pain for the rest of my life. I said no to that and through much prayer and your program my life has forever been changed.

My favorite verse Isaiah 40:31-"But those who hope in the Lord will renew their strength, they will soar on wings like eagles, they will run and not grow weary, they will walk and not be faint."

I'm not sure why it's taken me this long to share my story with you but your program and supplements, **I believe, literally saved my life. THANK YOU THANK YOU THANK YOU for being a pioneer in nutrition!**

Dr. Daniel Miller

Fort Wayne, IN

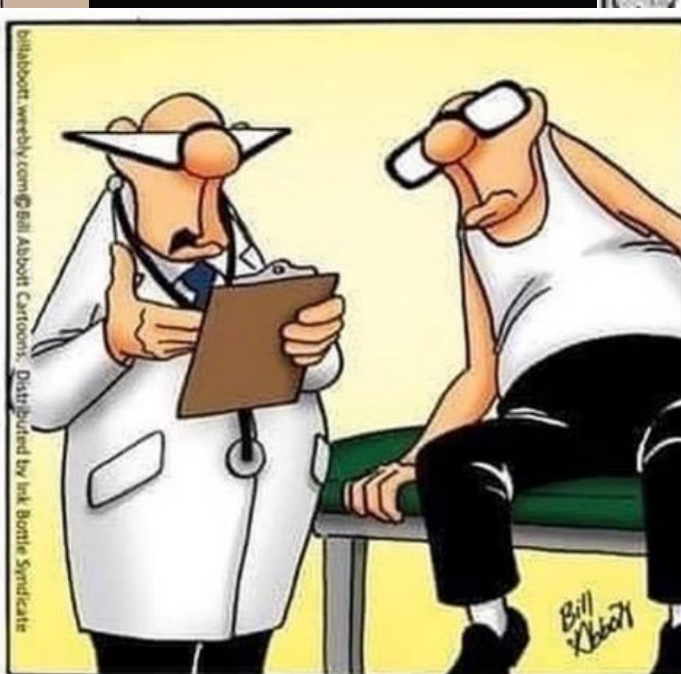
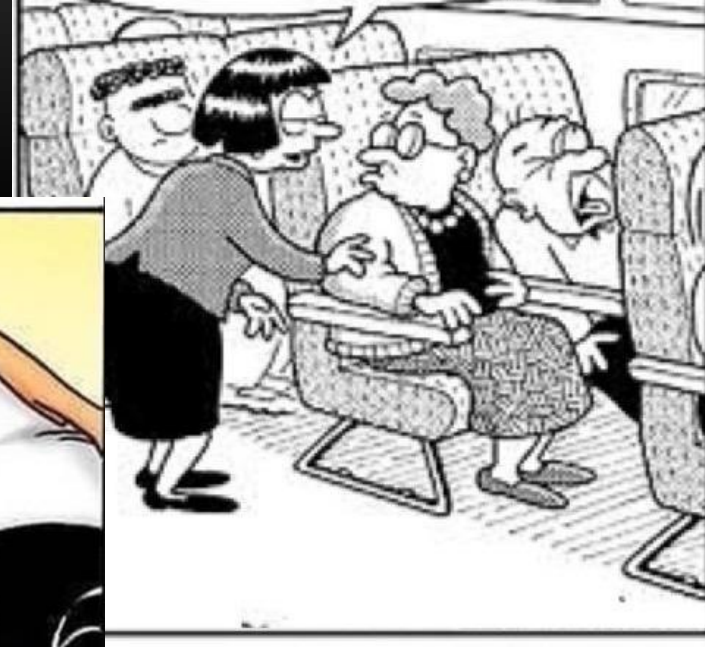


Is there anything worse than waking up to go to the bathroom?

Not waking up to go to the bathroom.



WHEN WE ASKED YOU TO TURN OFF ALL ELECTRONIC DEVICES, WE DIDN'T MEAN YOUR HUSBAND'S PACEMAKER...



"High sodium, high cholesterol, lots of toxins - your blood test is remarkably similar to a potato chip."

# DR. VAN D. MERKLE:

## CREDENTIALS

- Graduated 1982 Logan College of Chiropractic
- Doctor of Chiropractic
- Diplomate American Board of Chiropractic Internists
- Diplomate American Chiropractic Board of Nutrition
- Diplomate Chiropractic Board of Clinical Nutrition
- Vice President of Chiropractic Board of Clinical Nutrition
- Certified Clinical Nutritionist
- American Chiropractic Association
- Ohio State Chiropractic Association



# DR. VAN D. MERKLE:

# EXPERIENCE

- 39+ Years Chiropractic Practice
- 38+ Years Nutrition Practice
- 26+ Years Live Call-in Radio Talk Show Host
  - *Back to Health, Your Guide to Better Living* (WHIO)  
**[www.NewsTalkRadioWHIO.com](http://www.NewsTalkRadioWHIO.com)** to listen live
  - Saturday 11am-noon EST
- International Conference Speaker
- Local Seminars
- NewslettersAnna



# OBJECTIVE HEMATOLOGY

- Benefits of Blood Testing
  - Confidence in confronting difficult cases, diseases and conditions
  - Objective proof of results
- Risks of Not Blood Testing
  - Missed Disease
  - Missed Diagnosis
  - Malpractice / Liability
  - Missed opportunities to really save or change someone's life

# TRUTH: WHAT THE PUBLIC BELIEVES

- Real doctors order blood work.
- Without objective lab testing- you are just guessing
- +95% of the population does not believe in energy testing.
- Do you think that the top 10 energy DC experts would get the same results each testing the same 10 patients?





# CALCULATING THE HEALTHY RANGE (EXAMPLE):

- Calculating the middle 33% Healthy Range
- You have a Clinical Range of 10-50.
- To calculate, you take  $50 \text{ minus } 10 = 40$ .
- $40 \text{ times } 33\% = 13.2$
- Add 13.2 to 10 = 23.2 then subtract 13.2 from 50 = 36.8.
- This gives a healthy range from 23.2-36.8, which is the middle 33% of the clinical range (10-50), which leaves 33% from 10-23.2 and 33% from 36.8-50.

**The key point about the healthy range: The purpose is to optimize these sub-healthy ranges to avoid disease, and to restore other clinical ranges and sub-healthy ranges to the optimum levels.**





Integrative Oncology International conference in Seoul Korea. Dr. Van Merkle- Key Note speaker April 19, 2019





# Kevin's Vitamin Recommendations \*\*\*\* and follow the Low Carb Diabetic Diet

## Personal Vitamin and Supplement Program For: Kevin H.

2 Month  
Supply

Vitamin or Supplement	Dosage Per Day	AM	MIDN	PM	BED	Bottles	Quantity	Price	Extended Price
1 B6 (Neuro-K-500)	500 mg.	1				1	100 @	\$20.05	\$20.05
2 Beta Carotene	25000 I.U.	1				1	250 @	\$19.70	\$19.70
3 Calcium MCHC	750 mg.	1	1	1		1	250 @	\$30.30	\$30.30
4 Chlorella Plus	500 mg.	1		1		2	90 @	\$14.55	\$29.10
5 Chromium Picol. - JR	200 mcg.	1				1	100 @	\$7.60	\$7.60
6 Desiccated Liver	3000 mg.	1		1		1	250 @	\$12.20	\$12.20
7 Energenics	4	2		2		1	270 @	\$34.50	\$34.50
8 Germanium	150 mg.	1				2	30 @	\$41.60	\$83.20
9 Magnesium Glycinate	400 mg.	2		2		1	240 @	\$31.00	\$31.00
10 MLK 1000 [EPA/DHA]	2000 mg.				2	2	100 @	\$12.80	\$25.60
11 Niacinamide	1000 mg.	1		1		2	100 @	\$7.30	\$14.60
12 Pantothenic Acid	250 mg.	1				1	100 @	\$11.85	\$11.85
13 Ultra Preventive III (Multiple)	2	1		1		1	180 @	\$24.30	\$24.30
14 Lauricidin	See Instructions Below					1	72 @	\$35.75	\$35.75
15 Vitamin D [5000 IU]	See Instructions Below					1	250 @	\$6.45	\$6.45

### Specialty / Instructions

LAURICIDIN- Take 1.5 tsp per day

VITAMIN D- Take 1 every other day

Sub Total	\$386.20
Tax	\$27.03
<b>Total</b>	<b>\$415.17</b>



# TAKE 2 HEALTHCARE 2017 STATS

- Dr. Dyer:      Gross Business      Pay      %Pay of business
- 2016      425,132      119,111      28
- 2017      596,373      170,308      28
- Increase      40%      42%
- 3% of gross is Chiropractic
- 
- Dr. Yahle      Gross Business      Pay      %Pay of business
- 2016      343,711      87,992      25.6%
- 2017      487,458      122,923      25%
- Increase      40%      39.6%
- 3% of gross is Chiropractic



# DR. YAHLE: WORKING 22 TO 25 HOURS A WEEK

## 3% IS ADJUSTING

	2023	2022	2021	2020	2019	2018	2017
Annual Totals							
Gross Business	745,868.54	759,780.34	803,541.93	598,610.38	583,108.42	494,320.60	500,971.54
Gross Pay	146,679.56	140,891.75	152,030.89	117,988.55	119,011.97	118,925.66	122,923.41



# ANDREW R. DYER, D.C., D.A.B.C.A., D.C.B.C.N.

Total Gross Business	2017	2018	2019	2020	2021	2022	2023
Gross Business	\$596,504.75	\$627,687.86	\$687,246.79	\$717,708.88	\$864,641.62	\$844,178.34	<b>\$913,469.18</b>
Gross Pay	170,308.04	172,061.81	164,877.94	162,701.10	195,096.42	189,096.81	<b>203,398.97</b>

Sees patients about 25 hours a week: starting at 7:30 and out the door by 5pm

Takes 3-4 weeks of vacation.

Is done by noon on Thursdays and Fridays.

3% is adjusting

Gross pay does not include Malpractice, SSI, License renewal

Has been with Take2Healthcare for 20 years as associate.



# T2H BANK DEPOSITS:

## 3% OF SERVICE IS 'CHIROPRACTIC'

2019	2020	2021	2022	2023	
\$ 126,681.56	\$ 175,024.34	\$ 106,067.76	126,653.17	\$ 135,114.70	
\$ 124,808.55	\$ 147,273.75	\$ 117,801.36	121,199.17	127,034.34	
\$ 155,895.48	\$ 161,233.02	\$ 135,861.98	149,612.80	173,816.48	
\$ 169,759.21	\$ 97,254.17	\$ 157,694.01	112,465.00	137,446.17	
\$ 166,710.51	\$ 107,022.80	\$ 158,397.90	171,361.42	142,826.51	
\$ 149,448.39	\$ 178,664.31	\$ 192,271.14	158,508.01	186,590.27	
\$ 211,490.32	\$ 173,645.01	\$ 176,242.97	142,597.95	155,933.32	
\$ 149,533.19	\$ 141,202.73	\$ 126,461.99	121,559.51	141,253.77	
\$ 143,685.89	\$ 121,157.48	\$ 151,002.93	142,181.07	138,154.69	
\$ 167,362.20	\$ 146,139.96	\$ 154,327.13	154,994.26	133,210.51	
\$ 165,895.84	\$ 145,630.14	\$ 146,393.57	150,956.49	191,752.59	
\$ 173,240.57	\$ 172,015.69	\$ 177,994.53	152,899.96	116,309.32	
\$ 1,904,511.71	\$ 1,766,263.40	\$ 1,800,517.27	1,704,988.81	1,779,42.30	



# THE BEST INVESTMENT- SBN ROI:

- 2 pt per month for 12 months= \$12,000/year  
+600% ROI
  - Net \$500.00/patient which includes vitamin sales at 20% profit
- Vitamin sales, getting started:
  - Sell \$500.00 / month with 20% profit of \$100...ROI 20%/month
  - 240% ROI of \$1,200.00 if you sell \$500.00/month for 12 months at 20% profit





# LONG TERM GROWTH

- At one new patient per week and 30% retention  
These are very conservative estimates.
- 1 pt per week for 1 year (50 pts) at \$500.00 per patient net = \$25,000.00
- 1st year \$25,000 X 30% = \$7500
- 2nd year \$32,500 + \$25,000.00 + \$7500
- 3rd year \$40,000 (\$25K + \$7500 + \$7500)
- 4th year \$47,500
- 5th year \$55,000
- 6th year \$62,500
- 7th year \$70,000
- ***NOTE: This does not take into consideration retesting, additional vitamin sales, consultations etc.***



# PLANNING

- Patients
- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- ?????????



- Practice for Sale- 10-2023
- 2500 Sq. Ft. Prime Location in Montgomery Ohio, Beautiful Building, Easy in and Out Access, Plenty of Private Parking
- Mainly a Chiropractic Wellness/Supportive Care Office with long term patients with some WC, PI, and Insurance. **Most Patients Pay-\$95.00-\$130.00/Visit Prepaid (10-15 visits) or Paid at Time of Service.** **????What does this mean???** **Over \$100,000.00 in Collections on Less than 10 Easy Hours Per Week.** Practice is in decline.
- Practice includes all Administrative and Clinical Equipment, Interior and Leasehold Improvements, Goodwill, Non-Compete and is Turn Key Ready for Someone who wants their Own Practice or an Additional Clinic at a Real Bargain.
- Sweetheart All-Inclusive Sub-Lease Only \$3,000.00 per month **(\$36,000/year rent)** with only a 2% annual increase. Includes Gas, Electric, Water/Sewer, Garbage Pick-up, Building and Common Area Maintenance, Freedom to Make Interior Changes, No Prorated Property Taxes to Pay, NOT a NNN Lease it is an All-Inclusive Lease. **Over 7 years still available before Renegotiation of Terms with Owner-** **\$252,000.00 left on this 7 yr lease the doctor wants to get out of.** Dr probably originally planned on working 7 more years, but practice is declining.
- Dr. retiring after 40 years and over 34 Years at this Location. **Probably is old, outdated décor**
  - **How many patient files are active within last 3 years? How many total patient files?**
- Price includes up to 60-days Smooth Transition Period.
- Only \$95,000.00 **Probably would take 40-50K or less just to get out of the lease contract.**
- If you are interested in seeing the clinic or setting up a meeting to discuss this opportunity further. Call 513-677-2717 or e-mail [RMSCIN@aol.com](mailto:RMSCIN@aol.com)
- Sincerely,
- Dr. Richard XXX



# MARKETING AND ADVERTISING

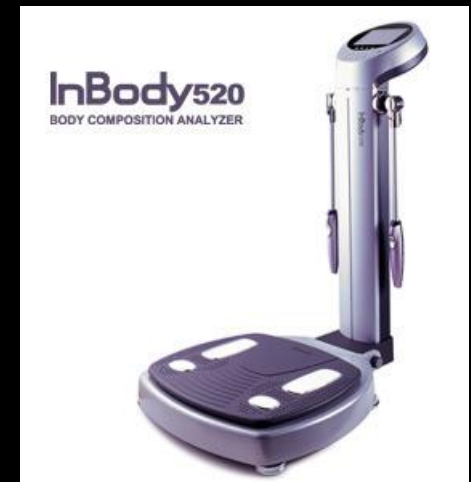
Caution: lot of 'advertising' people will contact you, but they don't know sales or what works  
-online yellow pages, social media advertising, direct mail etc.

Find your community- Church, schools, hobbies, sports, clubs that you will interact with people so they can get to know you.

Find the right people to connect with: Pastors,  
health food store owners, gym owners, business owners, etc

Radio has been by far the best marketing I have ever done

- consistently 250-300 New Patients each year
- 30+ years: \$1350/MO; \$16,200/year
- Sponsor for show?
- Keys to a successful radio show!!!
- Entertaining, accurate/factual and fast paced
- Which radio markets?
- Do you know a foreign language?





JUST FOLLOW THE  
REPORT:

PT: MM

DR: RB

/SHOW VIDEO OF DR  
BEARDON.

Alk. Phosphatase			54.000	
Creatine Kinase			186.000	
LDH			202.000	
SGOT (AST)	27.000	high	38.000	😊
SGPT (ALT)	52.000	High	61.000	😊
GGT (r-GTP)	69.000	High	184.000	😊
Serum Iron	130.000	high	169.000	😊
Ferritin	585.000	Very High	698.000	😊
Total Cholesterol	223.000	High	271.000	😊
Triglyceride	128.000	★	152.000	😊
HDL Cholesterol	47.000	low	48.000	😞
VLDL Cholesterol	23.000	high	28.000	😊
LDL Cholesterol	153.000	High	195.000	😊
Total Cholesterol / HDL Ratio	4.700	high	5.600	😊

Van Merkle

replied on *1/29/21 at 12:54 PM*

Don't over think this one. I love to get these kinds of patients because there are basically 2 things causing his problems and I would suspect alcohol obviously, due to the very high GGT and then hemochromatosis per the report.

Have him dump a pint of blood asap and have him avoid all alcohol for 2 weeks and then test the liver, iron and ferritin and lipids.

do the vitamins and have pt go on the Fresh Start diet for 7-10 days, then retest as noted above in 2 weeks and a complete blood test in 2 months.

keep good notes, these reports will look awesome in a couple of months.

Van



# JUST FOLLOW THE REPORT: PT: MM; DR: RB

RB

replied on 2/26/21 at 8:48 AM

Good Morning Dr. Merkle,

I wanted to give you an update and thank you for your help! Mr. MXXXX is making tremendous improvement. He reports that his thinking is much clearer, his memory is much better and he's not in a "fog". His skin color looks great again instead of ghost white. He noticed at church on Sunday that he could now actually read the words on the screen during praise and worship! Before he said it was very blurry. His acid reflux is 90% gone and his stomach doesn't feel bloated all the time. He sincerely thought before he started the SBN program that he was not going to live much longer. His hope for being healthy and living has gone way up!!

Obviously the numbers speak for themselves, but it sure is nice when the patient notices so many positive changes. This was all very big for him, as he owns a business and he is a major part of it's day to day operations. He was losing business because he was forgetting to call people back, had given quotes on jobs and would forget to schedule the jobs for his crews. **His wife testified that he is a different person! She stated that he's not in a bad mood all the time and acting out of his mind.** He had actually had friends call and ask if he was on drugs prior to starting the SBN program!!

**Again, thank you for your help, the SBN program you put together and your willingness to help a doctor like me who has no experience using laboratory analysis and very little experience using nutrition at this level to truly change people's lives!**

With Appreciation





# TESTING BEFORE GETTING THE COVID VACCINE\*\*\*\*\*

- 150018: Heparin-dependent Platelet Antibody (Serotonin Release Assay) | Labcorp
- **Member price for that test is \$442.30**
- **Covid-19 Vaccine Clotting Issues Resemble Heparin-Induced Thrombocytopenia**
- Apr 13, 2021
- **Two studies showed similarity to HIT**
- Separate case reports from Europe provide more details about a rare blood clotting disorder believed to be linked to AstraZeneca's Covid-19 vaccine, ChAdOx1 nCov-19, revealing its clinical similarity to autoimmune heparin-induced thrombocytopenia (HIT).
- A report from Germany and Austria detailed 11 cases of thrombosis or thrombocytopenia following immunization with the ChAdOx1 nCov-19 vaccine among 28 **patients with blood samples referred for investigation due to suspicion of vaccine-associated blood clots.**
- Nine of the 11 patients were women, with a median age of 36 years, who presented with one or more thrombotic events 5-16 days following vaccination. **Six of the patients died.**
- Another report detailed 5 cases — all healthcare workers — presenting with venous thrombosis and thrombocytopenia within 7-10 days of receiving a first dose of the vaccine. Four of the patients experienced severe cerebral venous thrombosis with intracranial hemorrhage, and **three of these patients died.**
- Both cohorts reported high levels of the HIT-related antibodies platelet factor 4-polyanion complexes, despite the fact that none of the patients had received heparin prior to symptom onset.
- The case reports were **published Friday, April 9 in *The New England Journal of Medicine*.**
- On Wednesday, the European Union's medical regulatory group stated that blood clotting should be considered a "very rare" side effect of the ChAdOx1 nCov-19 vaccine, but the European Medicines Agency (EMA) safety committee continued to back the vaccine.



# TESTING BEFORE GETTING THE COVID VACCINE\*\*\*\*

- The researchers noted that triggers other than heparin exposure are now understood to cause pro-thrombotic disorders that strongly resemble HIT, including exposure to certain polyanionic drugs.
  - “Given the parallels with autoimmune heparin-induced thrombocytopenia, anticoagulant options should include nonheparin anticoagulants used for the management of heparin-induced thrombocytopenia, unless a functional test has excluded heparin-dependent enhancement of platelet activation,” they wrote.
  - They suggested that these thrombotic events be named “novel entity vaccine-induced immune thrombotic thrombocytopenia (VITT) to avoid confusion with heparin-induced thrombocytopenia.”
  - The five cases detailed in the separate report involved four women and one man between the ages of 37 and 54 years of age, with the 5 cases occurring in a population of more than 130,000 vaccinated people.
  - Researcher Nina Schultz, MD, PhD, of Oslo University Hospital, Oslo, and colleagues wrote that their findings “indicate a shared pathophysiological basis of the condition in these five patients and **should raise awareness that a syndrome similar to autoimmune heparin-induced thrombocytopenia may occur in some persons after vaccination with ChAdOx1 nCoV-19.**”
  - “By providing a link between thrombosis and the immune system, these results strengthen the **view that vaccination may have triggered the syndrome,**” they wrote.
1. Separate case reports from Europe provide more details about a rare blood clotting disorder believed to be linked to ChAdOx1 nCov-19 vaccine, revealing its clinical similarity to autoimmune heparin-induced thrombocytopenia (HIT).
  2. **Both cohorts reported high levels of the HIT-related antibodies platelet factor 4-polyanion complexes, despite the fact that none of the patients had received heparin prior to symptom onset.**
- *Salynn Boyles, Contributing Writer, BreakingMED™*





# POSSIBLE COVID VACCINE INJURY?

Female 18 yr/old DOB: 7/20/2004

Had covid vaccine early 2022.

This is a friend's daughter, and she is sick a lot lately.

## SBN TICKET:

We won't know all of the side effects of the COVID "vaccine" until decades to come. By taking the vaccine (or not) you are part of the safety study. I would encourage them to report this to VAERS.

The LDH and CK could be cardiac biomarkers. Do the CK and LDH Isoenzymes and an EKG to rule this out. Should rule out the worst first.

I'd add the Cardiac Protocol to her supplement list and get those tests done asap. Retest the CK and LDH when she's been on everything for at least a week. If the report recommends a supplement already on the protocol (or any other protocol you're using), go with the higher dose of the two... don't combine the two doses.

Do you know when in 2022 she got the covid vaccine? did she get any boosters or additional covid vaccines?

D-Dimer, BNP included with the below testing...especially if there is any lack of endurance/stamina. Also examine the legs, more below the knees, for edema, bruising, redness, inflammation, swelling...do the legs, ankles and feet look normal? when squeezing the calf does it cause unusual pain? (a possible sign of blood clot or vein inflammation.) listen to the lungs.

Test Description	Current Rating 01/09/2023	
Glucose	79.000	low
Hemoglobin A1C (Gly-Hgh)	5.500	★
Uric Acid	5.700	high
BUN (Blood Urea Nitrogen)	8.000	★
Creatinine	0.910	high
GFR Est.	94.000	★
BUN / Creatinine Ratio	9.000	low
Sodium	138.000	low
Potassium	4.300	★
Chloride	101.000	low
Calcium	9.700	★
Phosphorus	4.100	★
Magnesium	2.100	★
Total Protein	7.600	★
Albumin	4.700	high
Globulin	2.900	★
A/G Ratio	1.600	★
Total Bilirubin	0.700	★
Alk. Phosphatase	47.000	low
Creatine Kinase	2022.000	Very High
LDH	271.000	Very High
SGOT (AST)	47.000	High
SGPT (ALT)	25.000	★
GGT (r-GTP)	11.000	★
Total Cholesterol	211.000	High
Triglyceride	103.000	★
HDL Cholesterol	48.000	low
VLDL Cholesterol	19.000	★
LDL Cholesterol	144.000	High
Total Cholesterol / HDL Ratio	4.400	High
TSH	1.190	★
T4 Thyroxine	8.200	★
T3 Uptake	23.000	Low
T7 (Free T4 Index) (FTI)	1.900	low
CRP C-Reactive Protein	2.000	★
Ferritin	43.000	★
Serum Iron	95.000	★
White Blood Count	10.100	high
Red Blood Count	4.910	high
Hemoglobin	14.100	★
Hematocrit	44.000	high

# POSSIBLE COVID VACCINE INJURY? CONT:

Female 18 yr/old DOB: 7/20/2004

Had covid vaccine early 2022.

This is a friend's daughter, and she is sick a lot lately.

Van Merkle  
replied on 1/23/23 at 11:35 AM

These results are quite alarming. They should be shared with their primary MD. That said, the D-Dimer indicates a very high tendency toward blood clots. The LDH indicates liver.

The Very high Creatine Kinase indicates major problems and muscle breakdown. I would do a Fresh Start diet for 2 weeks the Cat 1 diet. immediately use Ubiquinol 6/day, SBN CC 6/day D-Hist 8/day. vit C 3000mg/day, vit E 800IU/day. vitamin D at 10,000IU/day for 2 weeks then down to 5,000 IU/day, Lauricidin 1/day.

Ultrazyme 2/meal, one biodophilus/day, magnesium malate 2/day, calcium mchc 2/day, epa/dha 1/day, B12/folic 1/day, one multi vit. do this for 2-3 weeks and retest the CK, LDH, CBC, D-dimer, vit D and BNP.

Van Merkle  
replied on 1/23/23 at 11:37 AM

one more thing: plenty of protein, organic eggs at least 2/day if not 3-4 during these 2-3 weeks. no pork. is patient vegan? I hope not, red meat 3-4 oz /day on the rare side for cooking. avocado, chicken...super healthy eating.

**These numbers can not get much worse or stay this way without there being a catastrophic event.**

V

	01/19/2023	01/09/2023				
Eosinophils (Absolute)		0.100		0.000 - 0.200	0.000 - 0.400	
Basophils (Absolute)		0.100		0.000 - 0.100	0.000 - 0.200	
Granulocytes - Immature		0.000		0.000 - 1.500	0.000 - 2.000	
Granulocytes - Immature (Abs)		0.000		0.000 - 0.050	0.000 - 0.100	
ESR-Erythrocyte Sed Rate, Westergren		4.000		0.000 - 10.000	0.000 - 32.000	
Vitamin D 25-Hydroxy (total)		25.100		50.000 - 90.000	30.000 - 100.000	
CP - CEA	0.700	★		0.000 - 2.000	0.000 - 4.700	
CP - CA 15-3	21.900	high		0.000 - 15.000	0.000 - 25.000	
CP - CA 19-9	8.000	★		0.000 - 21.000	0.000 - 37.000	
CP - CA 125	8.400	★		0.000 - 18.000	0.000 - 38.100	
CP - CA 27.29	21.500	high		0.000 - 16.000	0.000 - 38.600	
CP - DHEA-Sulfate	340.000	high		210.000 - 333.200	110.000 - 433.200	
ACP - BNP (B-type Natriuretic Peptide)	11.600	★		0.000 - 40.000	0.000 - 100.000	
CK-MM Serum Isoenzymes	100.000	★		95.000 - 100.001	90.000 - 100.002	
CK-MB Serum Isoenzymes	0.000	★		0.000 - 1.000	0.000 - 3.000	
CK-BB Serum Isoenzymes	0.000	★		0.000 - 10.000	0.000 - 40.000	
CK Macro Type 1	0.000	★		0.000 - 3.000	0.000 - 4.000	
CK Macro Type 2	0.000	★		0.000 - 3.000	0.000 - 4.000	
D-Dimer	0.740	Very High		0.000 - 0.400	0.000 - 0.490	
LDH Isoenzyme 1	14.000	Low		22.000 - 27.000	17.000 - 32.000	
LDH Isoenzyme 2	20.000	Very Low		30.000 - 35.000	25.000 - 40.000	
LDH Isoenzyme 3	17.000	Low		20.000 - 24.000	17.000 - 27.000	
LDH Isoenzyme 4	15.000	High		8.000 - 10.000	5.000 - 13.000	
LDH Isoenzyme 5	34.000	Very High		9.000 - 15.000	4.000 - 20.000	
Creatine Kinase	3585.000	Very High	2022.000	⊗	81.500 - 132.500	32.000 - 182.000
LDH	272.000	Very High	271.000	⊗	138.880 - 190.700	119.000 - 226.000



Patient had a second covid shot in November of 2023

Pt history:  
Colostomy 2010 due to Ulcerative Colitis

History of Hep C many years ago.

Quanta Sure Hep C test was negative.

Test Description	Current Rating		Prior	03/19/2024
	04/25/2024		04/05/2024	
Glucose				89.000
Hemoglobin A1C (Gly-Hgh)				5.500
Uric Acid				6.600
BUN (Blood Urea Nitrogen)				18.000
Creatinine				1.260
GFR Est.				63.000
BUN / Creatinine Ratio				14.000
Sodium				143.000
Potassium				4.500
Chloride				106.000
Calcium				9.400
Phosphorus				4.000
Magnesium				2.200
Total Protein				6.700
Albumin				4.300
Globulin				2.400
A/G Ratio				1.800
Total Bilirubin				1.100
Alk. Phosphatase	687.000	Very High	571.000	582.000
Creatine Kinase				71.000
LDH				162.000
SGOT (AST)	106.000	Very High		89.000
SGPT (ALT)	138.000	Very High		108.000
GGT (r-GTP)	714.000	Very High		755.000
Total Cholesterol				238.000

# TESTING AFTER COVID:

## SBN PANEL PLUS D-DIMER

- D-dimer elevates with increasing risk for venous thromboembolism (VTE) and is often elevated with sepsis. (Sepsis is medical emergency caused by the body's response to an infection and can be life-threatening. Sepsis is the consequence of widespread inflammation (swelling) in the body). D-dimer can also be elevated with cancer, pulmonary embolism, trauma/surgery and deep vein thrombosis. Even a solitary sharply elevated D-Dimer could indicate severe underlying disease.
- Nutrients: SBN CC (for yellow high), Vit K (add for red high) and additional Bromelain (add for blue high)



# TESTING BEFORE GETTING THE COVID VACCINE\*\*\*\*

- Why is the vaccine induced clotting/inflammation problem more common in young people?
- 18 boys under 18yr/o hospitalized for heart problems after vaccination.
- 13% of women vaccinated while pregnant had spontaneous miscarriage.
  - 40,000 women got covid while pregnant in 2020 and no reports of problems.
- Menstruating women are having periods affected by vaccination.
- Councill Rudolph
- April 26, 2021 MEDPAGE:
- All COVID-19 vaccines are experimental treatments. They all focus on the spike protein of the virus COVID-19 carries on its surface. As humans we carry spike proteins too. A woman's placenta when she's pregnant, carries a bunch. A man's spike proteins are concentrated in our testicular tissues, especially those that produce sperm. That's why the Corona virus vaccine of 2014 **produced a profoundly effective infertility result**, and why it was shut down by the FDA. That's also why the COVID-19 will also produce profound infertility in men and in women, by producing antibodies to attack our own cells. That's called autoimmunity. And now we hear talk of giving this vaccine to our children. Here we go again, 2+2=5.

**When will you know if your 5 yr/o daughter or son are infertile?**

**Will the vaccine cause impaired secondary sexual development when given to very young children?**



# SPEAKING TO GOOD MORNING AMERICA

## JAN 4, 2022

- [Januatr4y m10l8 at 2mpi0:h24shue 02duPM](#) ·
- CDC Director Rochelle Walensky confirmed that "the overwhelming number of deaths, over 75 percent, occurred in people who had at least four comorbidities, so these are people who were unwell to begin with."
- Co Morbidities:
- 1 Obesity
- 2 Diabetes
- 3 Hypertension
- 4 High cholesterol
- 5 Blood thinners/edema
- 6 ALL DRUGS ARE CO MORBIDITIES



# COVID VACCINE AND MISCARRIAGE

- Now-released **Pfizer** court-ordered, released data —
  - which the Food and Drug Administration wanted to hide for 75 years
  - reveal the **miscarriage rate** among women whose pregnancy outcomes were known **was 87.5%.**
- **A CDC-sponsored study** that was widely used to support the claim that the shot is safe during pregnancy **misreported the data.**
  - **The actual miscarriage rate in that paper was 82%**
- All the while, they've had Pfizer data showing the shots cause shocking rates of miscarriage which, adding insult to injury, have been **blatantly miscategorized as a “recovered/resolved” adverse effect.**<sup>4</sup> **Who in their right mind would consider DEATH a resolved side effect unless they had a depopulation agenda in mind all along?**



# THIS IS BILL GATES

Worth \$98B

DIRECT  
QUOTE:

Population  
Control?

The world today has 6.8 billion people. That's headed up to about nine billion. Now, if we do a really great job on **NEW VACCINES**, health care, reproductive health services, we could **LOWER** that by perhaps 10 to 15 percent...





# TESTING AFTER GETTING THE COVID VACCINE

Laboratory testing for suspected COVID-19 vaccine–induced (immune) thrombotic thrombocytopenia

Emmanuel J. Favaloro, First published: 17 June 2021 <https://doi.org/10.1111/ijlh.13629>

## CONCLUSION

VIPIT/VITT/VATT/TTS represents serious clinical events that occur in a small proportion of people vaccinated with COVID-19 adenovirus–based vaccines..., some workers have shown enhancement of platelet activation by addition of vaccine.<sup>17, 18, 22</sup> In one recently published commentary,<sup>45</sup> the authors noted several components of the vaccine that could plausibly be “responsible for causing the production of anti-PF4 antibodies; Adenovirus has also been shown in earlier animal studies to potentially lead to platelet clearance, thrombocytopenia and platelet aggregation through a von Willebrand factor-P selectin–mediated mechanism.<sup>46</sup> However, the animal studies utilized a high concentration of viral particles injected directly into a vein, **and thrombocytopenia occurred within hours of injection.**

In terms of laboratory tests, **the key initial findings in suspected VITT are thrombocytopenia, highly raised D-dimer**, potentially reduced fibrinogen, and in almost all patients the presence of PF4 antibodies (Platelet Factor 4) detected by ELISA assay.



# TESTING AFTER GETTING THE COVID VACCINE

Laboratory testing for suspected COVID-19 vaccine–induced (immune) thrombotic thrombocytopenia

Emmanuel J. Favaloro, First published: 17 June 2021 <https://doi.org/10.1111/ijlh.13629>

VIPIT (vaccine-induced prothrombotic immune thrombocytopenia), VITT (vaccine-induced [immune] thrombotic thrombocytopenia), VATT (vaccine-associated [immune] thrombotic thrombocytopenia), and TTS (thrombosis with thrombocytopenia syndrome)

D-dimer levels can be elevated in many clinical circumstances, especially in hospitalized patients. D-dimer should not be used as an aid for exclusion of venous thrombosis or pulmonary embolism in pediatric patients in any circumstance and adult patients with<sup>6-8</sup>:

- Therapeutic dose anticoagulant administered for >24 hours before D-dimer is measured
- Thrombosis distal to the knee only
- Fibrinolytic therapy within previous seven days
- Upper extremity thrombosis
- D-dimer levels may be falsely negative if the elapsed time between thrombosis onset and D-dimer measurement is sufficient such that D-dimer has been cleared from the circulation.

**The following conditions are associated with an increase in D-dimer concentrations, even in the absence of venous thrombosis:**

- Aortic aneurysm
- Trauma or surgery within previous four weeks
- Disseminated malignancies
- Disseminated intravascular coagulation
- Sickle cell disease
- Sepsis, severe infections, pneumonia, severe skin infections
- Liver cirrhosis
- Pregnancy

**Reference Interval:** 0.00–0.49 mg/L FEU (Fibrinogen equivalent units)



# MY COMMENTS PUBLISHED IN MEDPAGE:\*\*\*\*

- June 8, 2021
- @Jean Gearing: “I have a high risk of terrible death if I catch covid, due to co-morbidities. I got my vaccine as soon as I could. I hope everyone gets vaccinated.” Is it possible that the US had such an unusual high death rate from covid from some facts: The US by far takes more drugs per capita than anywhere in the world and the US is number one or close to number one for obesity or excessive weight? The US is less than 20th in overall longevity. So, is Covid 19 really so deadly or is our population very unhealthy and getting worse? I am a 64 yr/o male in exceptional health, I can mitigate my risks and deal with the Covid 19 disease. (In fact, I’ve been in very close contact with those that have been infected.) but side effects that a person might have from the vaccines have been deadly in a few people that were truly healthy. No one, who is truly healthy dies or has long haul from Covid 19. I would guess that 90% of co-morbidities are self-induced from poor habits and poor choices. So, I should be denied and shamed because of your life style choices? BTW, my mother is 89yr/o and on no meds and has chosen to not get vaccinated. If you have co-morbidities, take the vaccines, make better choices and get healthier! (Most co-morbidities can be reduced or even eliminated.)

# INFORMED CONSENT DISCLOSURE TO VACCINE TRIAL SUBJECTS OF RISK OF COVID-19 VACCINES WORSENING CLINICAL DISEASE

INT J CLIN PRACTICE 2021MAR;75(3):E13795. DOI:

10.1111/IJCP.13795. EPUB 2020 DEC 4. \*\*\*\*\*

- Since the start of the discussions on COVID shots I've been telling you that there was more to this than meets the eye and that the shots were bad news. The usual suspects couldn't wait to get the shots. Now we get more bad news every day but there is no way to undo the damage. Calling you the "Walking Dead" is as un PC as I can get, but you are in serious trouble and I think denial is running rampant.

- 
- Zot
- 

- **Results of the study: COVID-19 vaccines designed to elicit neutralizing antibodies may sensitize vaccine recipients to more severe disease than if they were not vaccinated. Vaccines for SARS, MERS and RSV have never been approved, and the data generated in the development and testing of these vaccines suggest a serious mechanistic concern:**

- 



# THE UNVAXXED AND A HISTORY OF CYNICISM

BY DAVID GALINSKY, MD SEPTEMBER 21, 2021

- The vaccines save lives of the Vulnerable, the vast majority of whom are elderly (average age of “Covid death” is greater than the average life expectancy. The average age of a “Covid death” in the UK is 82.5 years. In Italy it’s 86. Germany, 83. Switzerland, 86. Canada, 86. The US, 78, Australia, 82.) It is suspicious enough that average age of death is 8 years younger in the US than Canada (or their medical care is much better?) To pretend that everyone needs a Covid vaccination is absurd.



# MERCOLA 5-8-2024

- Throughout COVID-19, the more money countries spent complying with the WHO's guidelines for mitigating COVID-19, the more people died.<sup>1</sup> Because of this, many countries in Africa had a COVID-19 death rate which was less than 1%<sup>2</sup> of that seen throughout the Western World.
- 
- In turn, many political parties are now vocally opposed to it (e.g., Germany, the Netherlands, the Philippines and Estonia).<sup>24,25,26,27</sup> Furthermore, some countries are even beginning to pursue charges against those who were complicit in the COVID-19 disaster (e.g., Italy investigated the former health minister for homicide<sup>28</sup> because he covered up vaccine deaths, and Slovakia's Prime Minister is investigating the entire COVID response<sup>29</sup>).

# Well, well, well...look at what the hell just surfaced

🔒 nw-connection.com

The *Virology Journal* – the official publication of Dr. Fauci's National Institutes of Health – published what is now a **blockbuster article** on August 22, 2005, under the heading – get ready for this – **“Chloroquine is a potent inhibitor of SARS coronavirus infection and spread.”** (Emphasis mine throughout.) Write the researchers, “We report...that chloroquine has strong antiviral effects on SARS-CoV infection of primate cells. These inhibitory effects are observed when the cells are treated with the drug **either before or after exposure to the virus, suggesting both prophylactic and therapeutic advantage.**”

This means, of course, that Dr. Fauci has known for 15 years that chloroquine and its even milder derivative hydroxychloroquine (HCQ) will not only treat a current case of coronavirus (“therapeutic”) but prevent future cases (“prophylactic”). **So HCQ functions as both a cure and a vaccine.** In other words, it's a wonder drug for coronavirus. Said Dr. Fauci's NIH in 2005, “concentrations of 10  $\mu$ M **completely abolished SARS-CoV infection.**” Fauci's researchers add, “chloroquine can effectively **reduce the establishment of infection and spread of SARS-CoV.**”



For those who haven't followed the story, during the course of the Covid pandemic, it was revealed that ivermectin - a drug that has been administered billions of times to humans and **is on** the World Health Organization's list of *Essential Medicines* - was found in numerous clinical trials to have efficacy in early treatment of Covid-19. If you're looking for a primer on this, **here is a website** that aggregates all of the clinical trials and **here is a discussion** with Bret Weinstein and Dr. Pierre Kory that serves as a great introduction to the topic.

## Ivermectin for COVID-19

**99 studies from 1,089 scientists**  
**137,255 patients in 28 countries**

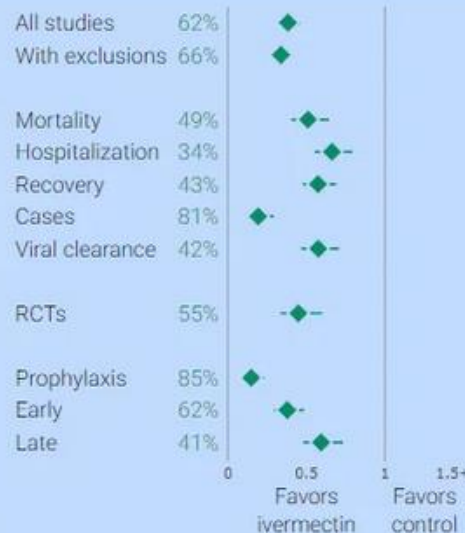
Statistically significant improvement for **mortality, ventilation, ICU, hospitalization, recovery, cases, and viral clearance.**

**85%, 62%, 41%** improvement for prophylaxis, early, and late treatment CI [77-90%], [51-70%], [27-52%]

**55%** improvement in **46 RCTs** CI [40-66%]

**49%** lower **mortality** from **51 studies** CI [35-60%]

COVID-19 IVERMECTIN STUDIES. AUG 2023. C19IVM.ORG



If you've been at least *semiconscious* over the last two years, you've noticed that early means of treating Covid outside of the vaccines (like Vitamin D, hydroxychloroquine and ivermectin) were routinely shunned by "the science" and then, by proxy, the useful idiots in the mainstream media.

Out of all of the early treatments, ivermectin got the shortest end of the stick. Not only was it likely the most efficacious of all the early treatments, it was also routinely subject to bastardization and a berating by the media.

The disinformation campaign about ivermectin, spearheaded by mainstream media ("*brought to you by Pfizer!*") reached its fever pitch when the media and government agencies alike appeared to knowingly and maliciously juxtapose the human dosage of the drug with the coincidental and mostly unrelated fact that it was *also* used in a veterinary dosage to deworm horses.







**Tim Young** ✓

@TimRunsHisMouth

Sooo... the new variant was detected in fully vaccinated people... don't worry, I'm sure another shot will protect you.

**Instead of "death" rate..  
LETS LOOK AT COVID "SURVIVAL" RATE??**

**Here's the percentage of 'world population'  
that have NOT died from COVID19**

---

<b>UK:</b>	<b>99.972%</b>
<b>BELGIUM:</b>	<b>99.944%</b>
<b>SPAIN:</b>	<b>99.956%</b>
<b>ITALY:</b>	<b>99.957%</b>
<b>BRAZIL:</b>	<b>99.935%</b>
<b>AFRICA:</b>	<b>99.997259%</b>
<b>AUSTRALIA:</b>	<b>99.99669%</b>
<b>USA:</b>	<b>99.954%</b>
<b>CHINA:</b>	<b>99.99967%</b>
<b>INDIA:</b>	<b>99.9935%</b>

**DATA SOURCES: WORLD HEALTH ORGANIZATION | JOHN HOPKINS COVID RESOURCE CNTR  
| WIKIPEDIA | GOOGLE**



Had both my shots, now working  
on a couple of boosters.



## COMPARISON DELTA FOR NEW BLOOD VALUES GLUCOSE - MAGNESIUM

TEST DESCRIPTION	OLD				NEW		
Glucose	65.00	-	110.00		65.00	-	99.00**
Hemoglobin A1C (Gly-Hgh)	3.40	-	6.10		4.80	-	5.90
Uric Acid	2.50	-	8.00		2.40	-	8.20
Blood Urea Nitrogen (BUN)	10.00	-	20.00		5.00	-	26.00
Creatinine	0.50	-	1.50		0.50	-	1.50
BUN / Creatinine Ratio	7.50	-	18.50		8.00	-	27.00
Sodium	138.00	-	146.00		135.00	-	145.00
Potassium	3.50	-	5.50		3.50	-	5.20
Chloride	96.00	-	110.00		97.00	-	109.00
Magnesium	1.70	-	2.40		1.60	-	2.60

January 2024: Uric Acid was increased to 8.40



## EGFR BLOOD TEST FOR KIDNEY FUNCTION

**NIX RACE FROM EGFR**, SAYS JOINT TASK FORCE  
— **GROUP URGES LABS TO ADOPT MODIFIED KIDNEY  
FUNCTION EQUATION WITHOUT RACE VARIABLE**

BY KRISTEN MONACO, STAFF WRITER, MEDPAGE TODAY  
SEPTEMBER 23, 2021

EGFR IS A CALCULATION OF CREATININE, AGE  
AND SEX BUT NO LONGER RACE.



# COMPARISON DELTA FOR NEW BLOOD VALUES

## CALCIUM - LDH

TEST DESCRIPTION	OLD				NEW		
Calcium	8.60	-	10.70		8.50	-	10.60
Phosphorus	2.40	-	4.60		2.50	-	4.50
Calcium / Albumin Ratio	2.03	-	2.71		2.03	-	2.71
Total Protein	6.00	-	8.00		6.00	-	8.50
Albumin	3.50	-	5.00		3.50	-	5.50
Globulin	1.90	-	3.70		1.50	-	4.50
A/G Ratio	1.10	-	2.30		1.10	-	2.50
Total Bilirubin	0.10	-	1.20		0.10	-	1.20
Alkaline Phosphatase	41.00	-	138.00		25.00	-	150.00
LDH	100.00	-	225.00		100.00	-	224.00

# COMPARISON DELTA FOR NEW BLOOD VALUES

## SGOT - VLDL

TEST DESCRIPTION	OLD				NEW		
SGOT (AST)	0.00	-	40.00		0.00	-	40.00
SGPT (ALT)	0.00	-	47.00		0.00	-	40.00
GGT	5.00	-	65.00		0.00	-	65.00
Serum Iron	50.00	-	180.00		35.00	-	155.00
Ferritin	10.00	-	291.00		10.00	-	322.00
Cholesterol	140.00	-	200.00		100.00	-	169.00
Triglyceride	10.00	-	195.00		0.00	-	149.00
HDL Cholesterol	35.00	-	55.00		40.00	-	59.00
LDL Cholesterol	65.00	-	130.00		0.00	-	99.00
VLDL Cholesterol	5.00	-	40.00		5.00	-	40.00

## COMPARISON DELTA FOR NEW BLOOD VALUES CHOLESTEROL/HDL RATIO - MCH

TEST DESCRIPTION	OLD				NEW		
Total Cholesterol / HDL Ratio	0.00	-	5.00		0.00	-	4.40
T4	5.50	-	13.00		4.50	-	12.00
T3 Uptake	32.00	-	43.00		24.00	-	39.00
T3 Total	83.00	-	200.00		71.00	-	180.00
T7	2.10	-	4.70		1.20	-	4.90
White Blood Count	4.80	-	10.80		4.00	-	10.50
Red Blood Count	3.80	-	5.50		3.77	-	5.28
Hemoglobin	12.00	-	16.00		11.50	-	15.00
Hematocrit	37.00	-	47.00		34.00	-	44.00
MCV	82.00	-	99.00		80.00	-	98.00
MCH	27.50	-	32.50		27.00	-	34.00

**Total T3 was low at 83 and changed to now low at 71 in 2-2017**  
**RBC was 3.80 and recently changed to 3.77 in 2-2017**





# COMPARISON DELTA FOR NEW BLOOD VALUES

## MCHC - CK

16

TEST DESCRIPTION	OLD				NEW		
MCHC	32.00	-	36.00		32.00	-	36.00
Platelets	150.00	-	450.00		140.00	-	415.00
Polys (SEGS-PMNS)	50.00	-	70.00		40.00	-	74.00
Lymphocytes	20.00	-	40.00		14.00	-	46.00
Monocytes	1.00	-	8.50		4.00	-	13.00
Eosinophils	1.00	-	5.00		0.00	-	7.00
Basophils	0.00	-	1.00		0.00	-	3.00
Erythrocyte Sed Rate (ESR)	0.00	-	9.00		0.00	-	30.00
CRP (C-Reactive Protein)	0.00	-	4.90		0.00	-	4.90
Creatine Kinase	26.00	-	174.00		24.00	-	173.00
Testosterone Free + Total (males >18)	348.00		1197.00		264.00		916.00
<b>CEA -tumor marker</b>	0.00		3.00		0.00		<b>4.70</b>
<b>CEA- Smokers</b>							5.60

**ALERT: As of 9-2022 the male Estrogen changed from 40-115 to 56-213 pm/ml.**

**-Male Estrogen Dominance correlates with low testosterone.**

**The healthy ranges have not changed, even though clinical ranges have.**



J.W.  
SAME TEST RESULTS  
2 DIFFERENT  
RANGES

NOTICE THE COLOR  
DIFFERENCES.

YOU HAVE TO PAY  
MORE ATTENTION TO  
THE "YELLOW".

Test Description	Date:	Current Result	Current Rating	Current Result	Current Rating
	12/10/2001	12/10/2001		12/10/2001	
Glucose		81.00	lo	81.00	Opt
Hemoglobin A1C (Gly-Hgh)		4.50	Opt	4.50	LO
Uric Acid		6.40	hi	6.40	hi
BUN (Blood Urea Nitrogen)		22.00	HI	22.00	hi
Creatinine		1.00	hi	1.00	hi
BUN / Creatinine Ratio		16.00	Opt	16.00	Opt
Sodium		140.00	lo	140.00	lo
Potassium		4.50	Opt	4.50	Opt
Chloride		102.00	Opt	102.00	Opt
Magnesium		2.20	lo	2.20	lo
Calcium		10.20	hi	10.20	hi
Phosphorus		3.30	lo	3.30	lo
Total Protein		7.30	Opt	7.30	Opt
Albumin		7.30	HI	4.60	hi
Globulin		2.70	lo	2.70	lo
A/G Ratio		1.70	hi	1.70	hi
Total Bilirubin		2.30	HI	2.30	HI
Alkaline Phosphatase 41-138		39.00	LO	88.00	Opt
LDH		182.00	hi	182.00	hi
SGOT (AST)		22.00	Opt	22.00	Opt
SGPT (ALT)		19.00	Opt	19.00	Opt
GGT		14.00	Opt	14.00	Opt
Serum Iron		169.00	hi	169.00	HI
Ferritin		222.00	hi	222.00	hi
Cholesterol		158.00	Opt	158.00	Opt
Triglyceride		145.00	hi	145.00	hi
HDL Cholesterol		38.00	lo	38.00	LO
LDL Cholesterol		91.00	Opt	29.00	hi
VLDL Cholesterol		29.00	hi	91.00	hi
Total Cholesterol / HDL Ratio		4.10	hi	4.10	hi
T4 Thyroxine		6.10	lo	6.10	lo
T3 Uptake		28.00	LO	28.00	lo
T7 Free Thyroxine Index (FTI)		1.70	LO	1.70	lo
White Blood Count		4.50	LO	4.50	lo
Red Blood Count		4.00	LO	4.00	lo
Hemoglobin		17.00	HI	17.00	HI
Hematocrit		47.30	HI	47.30	hi
MCV		91.00	Opt	91.00	Opt
MCH		32.70	HI	32.70	hi
MCHC		35.90	hi	35.90	hi
Platelets		420.00	hi	420.00	HI
Polys (SEGS-PMNS)		71.00	HI	71.00	hi
Lymphocytes		42.00	HI	42.00	hi
Monocytes		13.00	hi	13.10	HI
Eosinophils		1.00	LO	1.00	Opt
Basophils		1.00	hi	1.00	hi
ESR (Erythrocyte Sed Rate)		14.00	HI	14.00	hi
CRP C-Reactive Protein		0.40	hi	0.40	hi



# THE TRUTH: LAST BEST HOPE

## CYSTIC FIBROSIS CASE

- You are the patient's Last Best Hope
- Everyone before you has failed.
- Where everyone else has failed...you will succeed because...



## LAST BEST HOPE CONT.

You will:

- Never give up.
- Study the problem and test more when needed.
- Give honest hope and encouragement.
- Be Patient...



# HIERARCHY OF NEEDS

WHERE ARE PEOPLE MORE LIKELY TO SPEND  
PRECIOUS LIMITED DOLLARS?

- Manicure/Pedicure
- Chiropractic Treatment for Headache/LBP
- Wellness Care
- Massage
- Avoid drugs
- Hypertension, high cholesterol
- Diabetes
- Lupus, MS, etc
- Cancer



# MY CASE LOAD FOR JANUARY OF 2009

## I AM THEIR LAST BEST HOPE.

- 3 new patients: Breast cancer
- 2 new patients: Prostate Cancer
- 1 new patient: ovarian cancer
- 2 new patients : lymphoma
- 1 new patient: COPD
- 1 new patient: liver cancer
- 2 new patients: Parkinson's
- 3 new patients: Diabetes type 2
- 2 new patients: diabetes type 1
- 1 np ADD/ADHD
- 1 NP : cystic acne
- 1 new patient with advanced kidney disease
- Several with high cholesterol, high blood pressure and depression and most on drugs
- Other cases include: 3 Alzheimer's, 1 kidney cancer, 2 MS, 1 Rh, 2 Headaches, 2 Osteopetrosis, 3 osteoporosis, 2 hepatitis, CFS several arsenic, lead, uranium, copper toxicity.



# ADD ANOTHER SERVICE TO IMPROVE OUTCOMES WITH YOUR CURRENT PATIENTS

- Open to alternative care.
- Willing to spend money for these problems. Why not have them spend it in your office?
- Trust you for chiropractic, they will more than likely trust you for this or at least be willing to give it a try.



# WHY NOT START WITH YOUR PATIENTS?

To Patients:

- Would you like to get healthier?
- Where will you be in 5 years if you don't make some changes?





# 7-10-2024 PT SBN MEMBER WITH HIGH BP

- Male 54 y/o
- Comment:
- Dear Dr. Merkle
- **I have been on blood pressure meds for 25 years.** Within the **3rd day** of taking the scheduled supplement program, based on the blood tests, I documented a huge drop in my blood pressure to 138/88 without meds every day. I have been on the supplement program and proper food intake for almost a month. After I cut the grass today I sat down and took my resting BP at 123/81. This is without the BP medication. I used to be at 170/105, or worse. I have noticed my blood pressure staying lower longer as I stay with Dr. Merkle's recommendations. **After so many years with hbp and 4 stents. To finally get to the true cause of my hypertension is such a relief.** Thank you Dr. Merkle.
- Dr. Eric DXXXX
- 
- Test findings: Blue high CK, red high LDH, high ferritin, low WBC, high PSA, elevated coronary risk factors; high hair silver and thorium, arsenic and aluminum, low minerals overall; high nickel in utec. It's usually easy when the proper testing is done. Dr. Merkle



WHAT WE HOPE TO PROVIDE YOU WITH  
IS A  
SYSTEM OF ANALYSIS...

Not a Cure For Disease



# BENEFITS OF A “SYSTEM OF ANALYSIS”

- Don't need the new vitamin of the month
- Don't have to know every new health fad but you can test it.



# THE SECRET!

- You don't have to know everything about every disease.
- You don't have to know the biochemistry of how it all works and why it isn't working.  
(Many time the 'experts' are baffled, too)

# THE SECRET CONT.

## **All that we have to do is:**

- Test
- Know what the tests mean
- Improve what we see in the testing
- Retest to chart progress

# THE SECRET CONT.

- We aren't going to treat the patient's disease whatever it is.
- But we can probably help the problems we see in the testing.
- **And when these problems** (anemia, thyroid/liver/GI dysfunction, mineral/vitamin deficiency, infections/inflammations, toxicity etc.) **improve the patient will more than likely get healthier!!**  
THEN.....



# THE SECRET CONT.

- The symptoms of their disease will improve.
- Remember: We are looking for Progress... not Perfection!



## EXPERTS: DISEASE VS. HEALTH

- Your patients may have been all over the country seeing the best and smartest '**Disease Experts**' without success.
- Becoming the '**Health Expert**' in your community is the best way you can help your patients.





# TWO ASPECTS TO SBN TREATMENT

1st is Foundational:

- Regardless of symptoms, fix what you find on the complete testing

2nd is Functional- Symptom or Disease Focus:

- Special nutrients and diets specific to the primary problem, condition or disease



**70% OF THE EARTH IS WATER AND  
VIRTUALLY NONE OF IT IS CARBONATED**



**SO THE EARTH IS, IN FACT, FLAT...**

**We're looking  
for someone  
who can do the  
work of two men**



**Oh,so it's  
only  
PART TIME?**

# FOUNDATION OF BLOOD ANALYSIS

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# FOUNDATION OF BLOOD ANALYSIS \*\*\*\*\*

## SBN Panel - Key Elements

Blood Type	Bilirubin	Red Blood Count
Glucose	Alkaline Phosphatase	Hemoglobin
Hemoglobin A1C	LDH	Hematocrit
Uric Acid	SGOT (AST)	MCV
Blood Urea Nitrogen	SGPT (ALT)	MCH
Creatinine	GGT	MCHC
BUN/Creatinine Ratio	Serum Iron	Platelets
Sodium, total	Ferritin	Polys (SEGS-PMNS)
Potassium	Cholesterol	Lymphocytes
Chloride	Triglycerides	Monocytes
Magnesium	HDL Cholesterol	Basophils
Calcium	LDL Cholesterol	Eosinophils
Phosphorus	VLDL Cholesterol	Erythrocyte Sed Rate
Calcium/Albumin Ratio	Cholesterol/HDL Ratio	C-Reactive Protein
Total Protein	T3 uptake	CPK
Albumin	T4	Vitamin D 25 Hydroxy
Globulin	T7 (Free T4 Calculated)	
A/G Ratio	TSH	
	White Blood Count	

**T3 Free**





Traffic backs up at the San Francisco-Oakland Bay Bridge toll plaza along Interstate 80 in Oakland, Calif., on July 25, 2019. (Justin Sullivan/Getty Images)

NORTHERN CALIFORNIA **PREMIUM**

## With Its Power Grid Under Pressure, California Asks Residents to Avoid Charging Electric Vehicles

BY JACK PHILLIPS | June 23, 2021 Updated: June 23, 2021

A A  Print





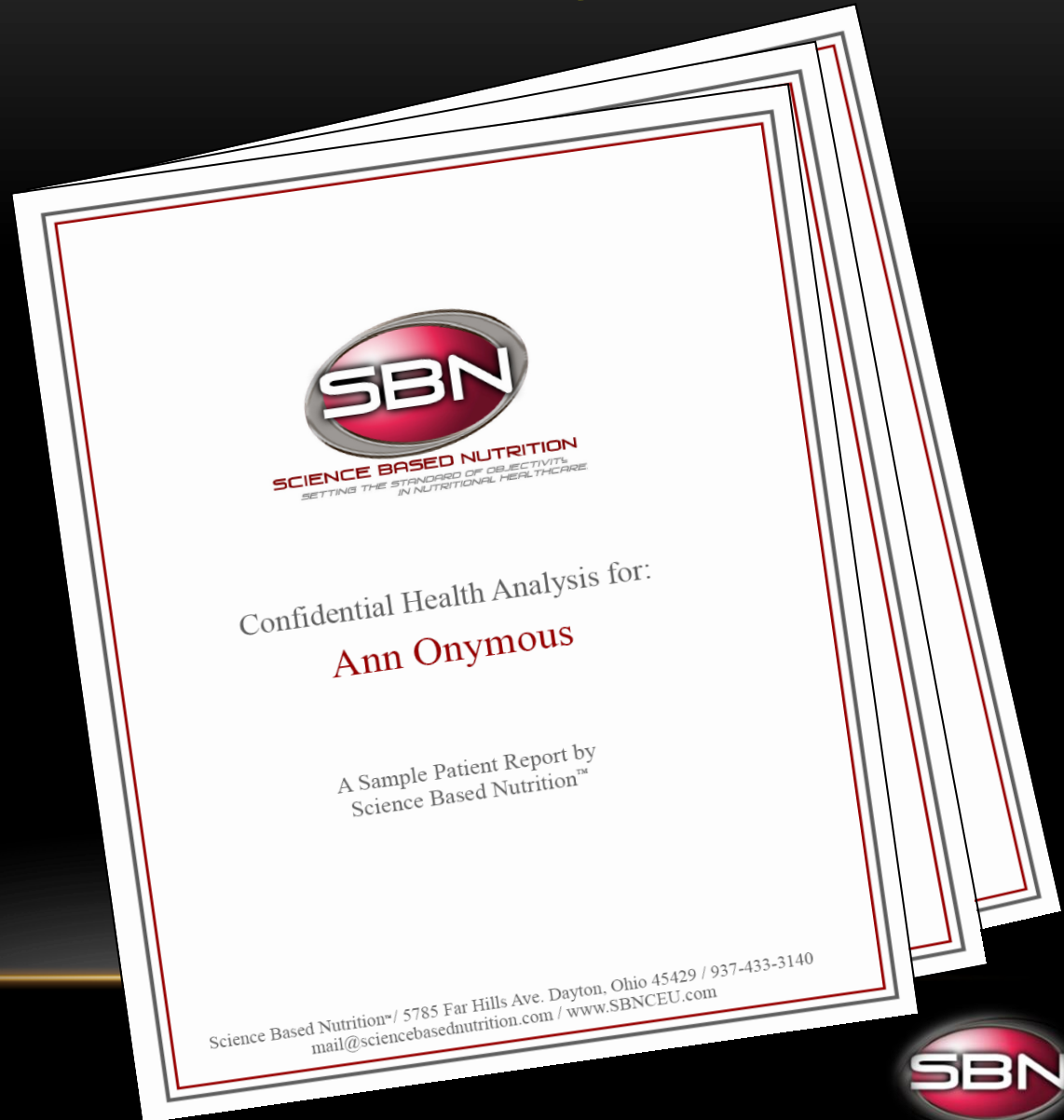
# SCIENCE BASED NUTRITION IS UNIQUE IN MANY WAYS.

- Integrates many factors:
  - Vitals
  - Current disease symptoms and complaints
  - Previous surgeries, cancer treatments, radiation and chemo therapy
  - Current medications.
  - Integrates various labs together (hair, blood, urine etc.)
  - Integrates lab findings with patient history and meds: thyroid removal, Type 1, etc
  - Correlates medication side effects with actual lab findings.
  - Lists nutrient deficiencies caused by the medications.
  - Give specific nutrient and diet recommendations based on the above findings.
  - Give a side by side color coded comparison of current and previous lab tests.
  - Provides a medical and nutritional evaluation based on the above information
  - Nutrition contra-indications and warnings
  - Specific vitamin recommendations and dosages based on the above information.
  - A unique custom report ready to give to the patient.



# SBN Confidential Health Analysis

Objective and Deliverable reports that patients will want to show their family, friends and other healthcare providers







## **Pandemic Proof Your Practice**

***Ann Onymous  
Initial Report of Findings  
August, 2019***

- Blood Panel
- Toxic Element Hair

5795 Far Hills Avenue • Dayton, Ohio 45429 • (937) 433-3140  
mail@sciencebasednutrition.com • www.sciencebasednutrition.com



**PANDEMIC PROOF YOUR PRACTICE**

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mail@sciencebasednutrition.com  
www.sciencebasednutrition.com  
Phone: (937) 433-3140 Fax: (937) 439-0088

**NUTRITION EVALUATION: 08/27/2020****PATIENT INFORMATION**

Ann Onymous  
1234 Anywhere St.  
Anywhere OH 45425  
(555) 555-5555  
Sex: F  
Birth Date: 10/01/1966  
Age: 53  
Blood Type: A+

**DATA USED FOR ANALYSIS**

Vitals	02/20/2019
Hair	02/20/2019
PSS	02/21/2019
Medication	02/21/2019
Blood	02/22/2019

**VITALS**

Height: 5'6"  
Weight: 145  
Blood Pressure: 139 / 95  
O2 Level: 83%  
Heart Rate: 98

**PRIMARY SYMPTOMS**

1. Hypercholesterolemia (High Cholesterol) E78.0
2. Tendency of High Blood Pressure
3. Tachycardia (High Heart Rate) R00.0
4. Diabetes Mellitus E11.9

**PRESENTING SYMPTOMS**

Allergic Rhinitis from food J30.5 • Anxiety Disorder F41.9 • Arthritic Disorder M12.9 • Constipation K59.00 • Depression F32.9 • Diabetes Mellitus E11.9 • Edema R60.9 • Fibromyalgia M79.7 • GERD K21.9 • Headaches R51 • Hypercholesterolemia (High Cholesterol) E78.0 • Indigestion K30 • Poor Concentration/Memory F07.8 • Rheumatoid Arthritis M06.9 • Sinusitis J01.90 • Tachycardia (High Heart Rate) R00.0 • Energy level is worse than it was 5 years ago • Fingernails are soft • Fingernails are splitting • Has tattoos • Sensitive to chemicals, paint, exhaust fumes, cologne • Difficulty concentrating • Cold feet • Cold hands • Heart skips beats • Heart palpitations • Spells of rapid heart rate • Tendency of High Blood Pressure • Excessive

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From PSS

From PSS

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Objective, diagnostic findings  
from lab testing

thirst • Frequently feels cold • Gets lightheaded when standing quickly • Painful feet • 3 or less bowel movements per week • Abdominal gas • Belching and burping after eating • Indigestion in 2 hours or more after meals • Irritable Bowel • Tends to constipation • Drinks alcohol • Drinks caffeinated pop/soda • Drinks Decaffeinate Pop/Soda • Drinks 1 or more pop/sodas per day • Frequent use of Artificial Sweeteners • Amalgam dental fillings • Bitter taste in the mouth in the morning • Frequent fever blisters • Frequent sore throats • Glands often swell • Tongue has grooves or fissures • Tongue is coated • Frequent headaches • Frequently feels faint • Frequent colds • Frequent sinus infections • Post nasal drip • Bruises easily • Problems with Eczema • Urinates more than 2 times per night • Frequent bladder infections • Frequent urination • Troubled by urgent urination • Abnormal cycle >29 days and/or <26 days • Breast Fibroids • Excessive menstrual flow • Retains fluid during periods • Radiated Thyroid • Thyroid removed

#### Patient Comments

*Patient states that over the last 5 years she has seen over 10 doctors and specialists and she is still getting worse. She states that this is very frustrating and depressing. She is having problems doing basic living and household duties and that this is affecting her family and she is no longer able to work full time. She notices her balance isn't as good as it used to be; she is bumping and tripping more. Her mother has Alzheimer's disease and she is very concerned about her loss of memory and concentration.*

#### Provider Comments/Findings

*Patient tends to lose concentration and I had to repeat questions several times. Her skin is pale and pasty and she has dark circles around the eyes. Her eyes are blood shot and she looks tired. She does have some difficulty standing on one leg and walking on her toes and heels. She has a general disheveled appearance*

#### PRIMARY FINDINGS SUGGESTIVE OF

- |                                       |  |
|---------------------------------------|--|
| ■ Hyperlipidemia                      | ■ Diabetic Factors                       |
| ■ Possible Kidney Involvement         | ■ Gout                                   |
| ■ Gastro/Intestinal Dysfunction       | ■ Vitamin D Deficiency                   |
| ■ Inflammation of Liver               | ■ Thyroid Considerations                 |
| ■ Anemia and Possible Hemochromatosis | ■ Possible Infection and/or Inflammation |
| ■ Mutagenic Considerations            | ■ Noted Blood Values                     |
| ■ Very Low Hair Chromium              | ■ High Hair Cadmium                      |
| ■ Noted Hair Values                   |  |

The purpose for this nutrition and lifestyle program is to create an optimum environment in which your body can heal and repair itself. This is achieved by eliminating foods and toxins, which adversely affect the body, and by providing nutrients that the body may be lacking.



All meds listed, plus how long and how often

Primary treatment

All side effects

Special considerations and vitamin contraindications

Drug caused nutrient depletions

Many older patients will be on HCTZ, which causes significant nutrient deficiencies

#### MEDICATIONS

- Acetaminophen - Occasional.
- Diflucan - 6 months - 2 years.
- Hydrochlorothiazide - 6 months - 2 years.
- Naproxen Oral - 6 months - 2 years.
- Zetia - More than 2 years.
- Coumadin - 6 months - 2 years.
- Glucophage - 6 months - 2 years.
- Lipitor - Less than 6 months.
- Prilosec - More than 2 years.

#### SIDE EFFECTS OF MEDICATIONS

- **Acetaminophen** (Otherwise known as Tylenol) is indicated for use in treating minor aches and pains for pain/arthritis & Panadol.

**Side Effects:** hepatitis; hives; decreased blood platelets; decreased white blood cells; discolored spots and small elevations of the skin.

**Possible Nutrients Depleted:** Glutathione.

- **Coumadin** indicated for treatment of venous thrombosis and embolism.

**Side Effects:** hemorrhage, necrosis (death), systemic atheroemboli (blood clots), cholesterol micro emboli (small blood clots), affecting the leg, foot, and toes, kidneys, liver, brain, pancreas, spleen, easy bruising and bleeding, unusual bleeding, excessive bleeding, bleeding gums, chest pain, accidental injury, pain, fatigue, edema, hypertension, headaches, dizziness, abdominal pain, diarrhea, nausea, back pain, depression, confusion, bronchitis, coughing, rash, urinary tract infection, dark or bloody urine.

**NOTE:** Use of certain nutrients can enhance the effect of Coumadin causing increased bleeding and bruising. A partial list of nutrients and the nutrients that are the most known to increase the effect of Coumadin include: garlic, chlorella, vitamin E, DHEA, bromelain, fish oils and American ginseng, devil's claw, fenugreek, ginger, ginkgo biloba, cranberry, red clover or sweet woodruff, cranberry, melatonin, antioxidants, grapefruit, joint supplements glucosamine and chondroitin, Valerian, Echinacea and Vitamin D supplements. Use of these or similar nutrients needs to be with careful consideration and possible additional INR/PT testing.

**Possible Nutrients Depleted:** Vitamin E and Vitamin K.

- **Fluconazole Oral** (Otherwise Known As: Diflucan) is used to treat fungal and yeast infections.

**Side Effects:** nausea; vomiting; diarrhea; stomach pain; headache; dizziness; and hair loss.

**Possible Nutrients Depleted:** Magnesium and Potassium.

- **Glucophage** (Otherwise known as Metformin) is indicated as an adjunct to diet to lower blood glucose.

**Side Effects:** diarrhea; nausea; vomiting; abdominal bloating; flatulence; anorexia; unpleasant or metallic taste; rash/dermatitis; & subnormal serum vitamin B 12 levels.

**Possible Nutrients Depleted:** Coenzyme Q10, Magnesium, Folic Acid, Vitamin B12 and B1.

- **Hydrochlorothiazide (HCTZ)** used as a "water pill" (diuretic) used to treat high blood pressure.

**Side Effects:** dizziness, lightheadedness, headache, blurred vision, loss of appetite, stomach upset, diarrhea, or constipation, excessive loss of body water and minerals (including potassium), muscle cramps or weakness, confusion, severe dizziness, unusual dry mouth or thirst, nausea or vomiting, fast/irregular heartbeat, unusual decrease in the amount of urine, fainting, seizures, numbness/tingling of the arms/legs, decreased sexual function, persistent

Medication may cause adverse lab findings

Lipitor is the most commonly prescribed drug in the US.  
Patients and doctors **must** know the nutrients that are depleted by these drugs.  
Do you think this information will be impactful for the patient?

### Additional listed medications

sore throat or fever, easy bleeding or bruising, stomach/abdominal pain, persistent nausea/vomiting, yellowing of eyes/skin.

**Possible Nutrients Depleted:** Coenzyme Q10, Phosphorous, Potassium, Sodium, Calcium, Vitamin D, Magnesium, Vitamin B1, Vitamin B6, Vitamin B12, Folic Acid, Selenium, Chromium, Vitamin C, and Zinc.

- **Lipitor (also known as Atorvastatin)** is used to treat cholesterol problems.

**Side Effects:** liver dysfunction; adrenal failure; diffused muscle pain; muscle tenderness; weakness; malaise, fever; myopathy; muscle disease; edema; digestive problems; gastritis; colitis; vomiting; ulcers; bleeding gums; bleeding ulcers; hepatitis, pancreatitis; gall bladder disease; asthma; decreased libido; leg cramps; bursitis; itching; alopecia; dry skin; acne; cystitis; hematuria; kidney stone; breast tenderness; various hemorrhage; loss of taste; palpitations; migraines; arrhythmia; and gout.

**Possible Nutrients Depleted:** Vitamin A, Vitamin D, Vitamin E, Vitamin K, Vitamin B12, Calcium, Folic Acid, Iron, Magnesium, Potassium, and CoQ10.

- **Naproxen Oral** (Otherwise known as Anaprox & Naprosyn) is used to relieve pain and inflammation associated with various conditions.

**Side Effects:** constipation; heartburn; abdominal pain; nausea; dyspepsia; diarrhea; stomatitis; headache; dizziness; drowsiness; lightheadedness; vertigo; skin eruptions; ecchymosis; sweating; purpura; tinnitus; hearing disturbances; visual disturbances; edema; dyspnea; palpitations; thirst; abnormal function liver tests; colitis; gastrointestinal bleeding and/or perforation; hematemesis; jaundice; pancreatitis; melena; vomiting; glomerular nephritis; hematuria; hyperkalemia; interstitial nephritis; nephrotic syndrome; renal disease; renal failure; renal papillary necrosis; agranulocytosis; eosinophilia; granulocytopenia; leukopenia; thrombocytopenia; depression; dream abnormalities; inability to concentrate; insomnia; malaise; myalgia; muscle weakness; alopecia; photosensitive dermatitis; urticaria; skin rashes; hearing impairment; congestive heart failure; eosinophilic pneumonitis; anaphylactic reactions; angioneurotic edema; menstrual disorders; chills and fever; aplastic anemia; hemolytic anemia; aseptic meningitis; cognitive dysfunction; epidermal necrolysis; erythema multiforme; Steven-Johnson syndrome; non-peptic gastrointestinal ulceration; ulcerative stomatitis; vasculitis; hyperglycemia; hypoglycemia.

**Possible Nutrients Depleted:** Folic Acid, Iron.

- **Prilosec** (Otherwise known as Omeprazole) is used to treat acid related stomach and throat problems.

**Side Effects:** gastric tumors; cancer; and impairment of fertility; headache; diarrhea; abdominal pain; nausea; dizziness; vomiting; rash; constipation; cough; fever; pain; fatigue; malaise; chest pain; tachycardia; bradycardia; palpitation; high blood pressure; edema; elevated liver enzymes (SGOT and SGPT); hepatitis; pancreatitis; anorexia, dry mouth; hypoglycemia; weight gain; muscle cramps; muscle and joint pain; muscle weakness; depression; hallucinations; confusion; insomnia; nervousness; tremors; apathy; anxiety; vertigo; skin inflammation; toxic epidermal necrolysis; alopecia; tinnitus; gynecomastia; and various anemia's.

**Possible Nutrients Depleted:** Vitamin B12, Folic Acid, Vitamin D, Calcium, Iron and Zinc.

- **Ezetimibe** (Otherwise known as Zetia) is used to help lower cholesterol.

**Side Effects:** acute infection of the nose; throat or sinus; gall stones; chest pains; joint pain; muscle pain; back pain; low energy; cough; diarrhea; stomach cramps; muscle disease; hepatitis; inflammation of the gall bladder; acute inflammation of the pancreas; erythema multiform; hives; rash; abnormal liver function tests; depression; decreased blood platelets;

Interpreting lab test results; what makes the SBN healthy vs. clinical ranges unique

dizziness; nausea; numbness; & tingling sensations.

Possible Nutrients Depleted: Vitamin A, Vitamin D, Vitamin E, Vitamin B12, Calcium, Folic Acid, Iron, Magnesium, Potassium, and CoQ10.

#### SUPPLEMENTS

B6 100mg, Methyl B12 Plus, Vitamin C 1000mg

#### INTERPRETING ALL TEST RESULTS

Your test results are color coded for ease of analysis:

Yellow = values are outside the healthy range but still within the clinical range

Red = values are outside the clinical range

Blue = values extremely higher or lower than the clinical range limits

#### INTERPRETING BLOOD LAB RESULTS

On the blood test results page found later in the report, you'll notice two columns on the right side of the page labeled "Healthy Range" and "Clinical Range". The clinical range is used by the medical community. Any values outside this range are indicative of a disease process. The healthy range is more narrow than the clinical range. Test values outside of the healthy range indicate results which are not as good as they should be. The tighter guidelines of the healthy range allows us to see signs of any developing diseases/conditions.

#### INTERPRETING HAIR LAB RESULTS

The hair analysis screening is looking for essential, nonessential and potentially toxic elements. These elements are irreversibly incorporated into growing hair. The amount of each element found in the hair is proportional to levels in other body tissues. This makes the hair analysis a suitable indirect screening for physiological excess, deficiency or maldistribution of elements in the body. All screening tests have limitations which must be taken into consideration. Scalp hair is vulnerable to external contamination by water, hair treatments and other products. The data provided by a hair analysis should be considered in conjunction with symptoms, diet analysis, occupation and lifestyle, water source, physical examination and the results of other laboratory tests. However, accepting these limitations, hair analysis can provide useful insights into the toxic load and biochemical condition of the body.

For each elevated toxic element in the hair, the most common sources of exposure are listed in the report. Due to pollution, our industrial culture and other environmental factors, it is impossible to completely eliminate your exposure to some toxic elements. However by knowing the sources of toxins elevated in your body, you can work to reduce your exposure, thus lessening the total toxic burden on your body.

#### DIAGNOSTIC FINDINGS

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The supported findings highlight other test results that are tied to that specific diagnosis

#### CORONARY RISK ASSESSMENT

■ Total Cholesterol:	220	■ HDL Cholesterol:	63
■ LDL Cholesterol:	114	■ VLDL Cholesterol:	18

Coronary Risk Assessment: 3.49 Average

The coronary risk is determined by taking the total cholesterol and dividing it by the HDL. To reduce your risk of cardiovascular problems a value below 4 is recommended. The Total Cholesterol is determined by adding the HDL, LDL, and VLDL together. Recent studies have shown a correlation between a high HDL and longevity. Think of HDL as the healthy cholesterol and generally the higher the better. LDL is the bad cholesterol, as it tends to plug the arteries. The VLDL is the very worst cholesterol and is more like sludge. Lower is better for the LDL and VLDL in determining coronary risk and overall health.

#### HYPERLIPIDEMIA

The Total Cholesterol, Triglycerides, LDL Cholesterol are high and the HDL Cholesterol, VLDL Cholesterol, and Total Cholesterol/HDL Ratio are optimal. This is hyperlipidemia, which is basically too much fat in the blood. The first considerations are probably liver and/or pancreatic dysfunction, diabetes mellitus, anemia, infection or inflammation. Be aware that more serious conditions may be developing. Excess weight, poor diet, caffeine intake and lack of exercise all contribute to this situation.

**This finding is supported by:**  
High Blood Uric Acid

**Nutrients Recommended:**  
Garlic 500mg • Opti EPA

#### DIABETIC FACTORS

The Glucose and Hemoglobin A1-C are high. The Hemoglobin A1-C indicates diabetes and the severity of diabetes. At this time, with the recommended vitamins and the Category 2 Diabetic Diet (found later in this report), the body should be able to regulate the glucose better to the point that the need for medication can be avoided or at least reduced. **WARNING:** If you are on medication for diabetes, you should not stop your medication without contacting the doctor. Be sure and get retested. Significant change can occur within days.

**This finding is supported by:**  
High Blood LDL Cholesterol • High Blood Uric Acid • Low Blood Chloride • High Blood Magnesium • Low Blood Phosphorus • Low Blood Total Protein • High Blood LDH • High Blood SGPT (ALT) • High Blood GGT (r-GTP) • High Blood Ferritin • High Blood Total Cholesterol • High Blood Triglyceride • High Blood White Blood Count • Low Hair Chromium

**This finding is associated with:**  
Presenting symptoms - Edema R60.9  
Medications Taken - Naproxen Oral

**Nutrients Recommended:**  
Glucoset • Opti EPA • Vital Trace Minerals

#### POSSIBLE KIDNEY INVOLVEMENT

The Blood Urea Nitrogen (BUN) and Magnesium are high and the Creatinine is very high. This most commonly indicates significant kidney disease and possible involvement including urinary tract infections or obstructions. This is a serious condition and needs appropriate treatment. A decrease in animal protein and an increase in plant based protein will probably be beneficial.

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All report verbiage is customized per patient, based off of objective lab test results.

Ex – this patient's Chloride and Globulin are low (red), the Total Protein is a little low (yellow), and the Albumin is a little high (yellow).

The SBN report is extremely patient friendly and the color coding helps make the report even easier to understand.

Blue	Very high, very low
Red	High, low
Yellow	Slightly high, slightly low

Proper water intake is important.

**This finding is supported by:**

High Blood LDL Cholesterol • High Blood Uric Acid • High Blood BUN (Blood Urea Nitrogen) • Low Blood Chloride • High Blood Magnesium • Low Blood Phosphorus • Low Blood Total Protein • Low Blood Globulin • High Blood Creatine Kinase • High Blood LDH • High Blood SGOT (AST) • High Blood GGT (r-GTP) • High Blood Total Cholesterol • High Blood Triglyceride • High Blood White Blood Count • Low Blood Red Blood Count • Low Blood Platelets • High Blood Eosinophils • High Blood ESR-Erythrocyte Sed Rate, Westergren • High Blood Creatinine • High Hair Selenium

**This finding is associated with:**

Medications Taken - Coumadin • Lipitor • Naproxen Oral • Hydrochlorothiazide

**Nutrients Recommended:**

A-Potene 25,000IU • L-Arginine 700mg • Vitamin C 1000mg

#### GOUT

The Uric Acid is high. High Uric Acid is associated with an increased risk for developing high blood pressure, diabetes, obesity, and kidney disease. Although high Uric Acid is commonly associated with excessive intake of red meat and alcohol; the connection between fructose consumption and increased uric acid is so reliable that a uric acid level can be used as a marker for fructose toxicity. One sugary drink daily, most commonly with high fructose syrup (HFCS), increases the risk of NALFD (non alcoholic fatty liver disease). Sugary beverages, including not only soda but also fruit juice, lemonade, fruit punch, and the like, are a major source of fructose. Fructose increases uric acid through a complex process that causes "cell shock" and increased cell death. Massive cellular die-off leads to increased uric acid levels. Nearly 10% of US children have NALFD, anyone with NALFD are at particular risk of complications, poor prognosis and the need for a liver transplant. Improvements in diet are imperative in lowering an elevated Uric Acid.

**This finding is associated with:**

Medications Taken - Lipitor

**Nutrients Recommended:**

Pantothenic Acid 500mg

#### GASTRO/INTESTINAL DYSFUNCTION

The Chloride and Globulin are low, the Total Protein is a little low, and the Albumin is a little high.

This is most likely due to poor digestion and/or low protein/high carbohydrate diet and seen in edema, malnutrition and malabsorption. Digestive enzymes with Chloride might be of benefit. Chloride, an electrolyte, is necessary for proper metabolism and digestion, especially the digestion of protein. A low Chloride is often due to loss of fluids from vomiting, diarrhea, sweating or high fevers but also drugs such as bicarbonates, corticosteroids, diuretics and laxatives can cause a loss of Chloride. Various vague symptoms of malaise or just not feeling well might occur. Chloride is regulated by the kidneys and helps control the acid and base balance in the body. Avoiding caffeine and alcohol is advised, stay well hydrated and digestive enzymes containing Chloride might be of benefit.

Many drugs or medications can cause or contribute toward any of these findings. Globulin, a type of protein, is important for a strong immune system and to fight disease. Albumin, another type of protein, helps with the transport of nutrients and is important for healing and repair. This mildly elevated level of Albumin might be of benefit in this case. One out of every four bites of food you eat (25%) should be of a protein source, preferably more plant based protein such as seeds, nuts, beans and sprouts. Eggs and even some fish, chicken, turkey and possibly small amounts

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Notated associated findings identify the patient's medications that directly influence their lab results

The PSS revealed the thyroid was removed, which is taken into account with the lab findings

**NOTE: SPECIAL CONSIDERATION**

Patient's thyroid was removed, as identified by the PSS  
This information is critical when analyzing thyroid test results  
Thyroid removal and radiated thyroid **must** be considered for proper treatment

of red meat may be beneficial.

**This finding is supported by:**  
High Blood SGOT (AST) • High Blood Monocytes

**This finding is associated with:**  
Presenting symptoms - Abdominal gas • Belching and burping after eating • 3 or less bowel movements per week  
Medications Taken - Coumadin • Lipitor • Prilosec • Naproxen Oral • Zetia • Hydrochlorothiazide • Diflucan • Glucophage

**Nutrients Recommended:**  
Bio-Dophilus • SBN Betaine Plus

**VITAMIN D DEFICIENCY**

The Vitamin D 25 Hydroxy blood test is a little low. Levels less than 32 ng/mL have been shown to significantly reduce intestinal calcium absorption, reduced bone density, reduced immune system, increased insulin resistance and risk of many types of cancer. This is the best way to determine true Vitamin D status. Minimal levels should be at least 50 ng/mL. Increase sun exposure and/or take Vitamin D.

**This finding is associated with:**  
Presenting symptoms - Depression F32.9 • Fibromyalgia M79.7 • Frequent fever blisters • Frequent sore throats • Frequent colds • Diabetes Mellitus E11.9 • Abnormal cycle >29 days and/or <26 days • Rheumatoid Arthritis M06.9 • Breast Fibroids

**Nutrients Recommended:**  
Vitamin D 5000IU

**INFLAMMATION OF LIVER**

The SGOT (AST) and GGT are a little high and the SGPT (ALT) is high. The liver is a little hypermetabolic or a little inflamed. Many drugs or alcohol can cause or contribute to this.

**This finding is supported by:**  
High Blood Glucose • High Blood LDH • High Blood SGOT (AST) • High Blood GGT (r-GTP) • High Blood Serum Iron • High Blood Ferritin • High Blood Triglyceride • High Blood White Blood Count • High Blood ESR-Erythrocyte Sed Rate, Westergren

**This finding is associated with:**  
Medications Taken - Coumadin • Lipitor • Prilosec • Naproxen Oral • Hydrochlorothiazide

**Nutrients Recommended:**  
Lipogen • Vitamin C 1000mg

**THYROID CONSIDERATIONS**

The Thyroid gland function has been removed by either surgery or radiation and special consideration needs to be made. Thyroid medication must be used. The TSH is high, the T3 Free, T7, and T4 are low, and the T3 Uptake is optimal. The thyroid metabolism appears low due to the level of T3 Free which is the most active thyroid hormone and thyroid function will likely trend lower. Since the thyroid gland has been removed and thyroid medication is being used the TSH should be low or even very low. The TSH being high in this case indicates that true thyroid function is at least a little low and will likely go lower.  
Note: if there is a history of thyroid cancer the TSH needs to be low or very low. It is thought that TSH stimulates the growth of thyroid cancer, in which case an increase in thyroid support medication might be of benefit and a Thyroglobulin test needs to be done if there is a history of



Critical, additional information  
for the situation

Associated findings are directly from the  
Patient Symptom Survey (PSS)  
The patient's medications and symptoms  
are correlated with their lab results

Comprehensive analysis, diagnosis,  
and treatment recommendations

thyroid cancer.

Symptoms of low thyroid functions include fatigue, digestive problems, sensitivity to cold, heart problems including slow pulse, abnormal heartbeats and weakened pulse, nerve damage, infertility in men and women; and menstrual irregularities.

Poor digestion, low vitamin D, low protein, lack of exercise, infection, inflammation, liver and kidney dysfunction, deficiencies of minerals and vitamins as well as exposure to toxic elements and chemicals can cause or contribute to thyroid dysfunction.

Caution for post thyroidectomy: the most frequent complication occurring in 20-50% of patients is inadvertent devascularization, nerve damage or removal of the parathyroid glands leading to hypocalcemia and the need for calcium and vitamin D supplementation. However, a low PTH (Parathyroid Hormone) value does not always cause hypocalcemia nor does a normal PTH value guarantee normocalcemia. Regular testing of calcium and vitamin D would be required if such is the case.

Use of nutrients to support the thyroid need to be carefully considered and possibly avoided so that they won't interfere with the thyroid medication. Modification of thyroid support medication might be needed and a referral to a thyroid specialist is encouraged if there is a history of thyroid cancer.

This finding is supported by:  
Low Blood Total Protein • Low Hair Iodine

This finding is associated with:  
Presenting symptoms - Depression F32.9 • Hypercholesterolemia (High Cholesterol) E78.0 • Energy level is worse than it was 5 years ago • Cold hands • Cold feet • Heart skips beats • Frequently feels cold • Excessive menstrual flow • Thyroid removed • Radiated Thyroid • Abnormal cycle >29 days and/or <26 days • Heart palpitations

Medications Taken - Lipitor

#### ANEMIA AND POSSIBLE HEMOCHROMATOSIS

The Ferritin is very high, the Serum Iron is a little high, the Red Blood Count (RBC), Hemoglobin, and Hematocrit are a little low, the White Blood Count (WBC) is high, and the MCV, MCH, MCHC, and RDW are optimal. Ferritin is a blood test that typically indicates iron reserves. High levels of iron reserves (Ferritin) show the severity of Hemochromatosis or iron overload.

Hemochromatosis is possibly the most common genetic condition in the world. The severity of Hemochromatosis symptoms and levels of Ferritin vary widely even within the same family. As levels of iron build up in the organs there can be rust like build up in organs most likely affecting the pancreas, liver, heart and spleen function. This rust/excess iron will destroy cells in the body and alter function. Donating blood or blood letting (phlebotomies) are performed regularly depending on the levels of Ferritin in order to lower your iron stores. As the iron stores are reduced, the Ferritin will also go down. Serial Ferritin testing will indicate the frequency of phlebotomy needed to maintain optimal Ferritin levels as well as the need for future phlebotomies.

Hemochromatosis is difficult to diagnosis based on symptoms because early symptoms are commonly associated with other conditions like chronic fatigue syndrome, arthritis, muscle weakness, thyroid disorders, hormonal problems in men and women, cardiovascular problems including arrhythmias like A-Fib, headaches, high blood pressure, prostate problems and even hair loss are seen. Many autoimmune diseases often show significant improvement with just one phlebotomy if high Ferritin is present. Some people also notice a darkening of mood, lower energy and reduced thought clarity as Ferritin increases.

Interestingly, in pre-menopausal women, Hemochromatosis is rare due to the loss of blood with monthly menstruation but once menopause occurs women develop Hemochromatosis at the

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## Comprehensive analysis, diagnosis, and treatment recommendations

same rate as men but rarely is it diagnosed in menopausal women. Post-menopausal women develop progressive hormone and thyroid problems leading to ever increasing drugs for HRT, bio-identical HRT and thyroid hormone medications as well as conditions associated in men with hemochromatosis like heart diseases, diabetes, liver, kidney diseases and other problems. The mild low Hemoglobin, Hematocrit, and Red Blood Count (RBC) are mild anemia but the very high Ferritin and elevated Serum Iron indicate that this is not an iron deficiency anemia. Nutrients other than iron need to be considered. The high WBC usually indicates an acute type of infection.

### Nutrients Recommended:

B6 100mg • Lauricidin • Methyl B12 Select • Silymarin 80 (Milk Thistle) • Vitamin C 1000mg

### POSSIBLE INFECTION AND/OR INFLAMMATION

The Creatine Kinase (CK) and ESR are a little high and the LDH and C-Reactive Protein are high. This CK is commonly associated with breakdown of muscle, either cardiac or skeletal. This could be the result of exercise in which case the nutrient recommendation can be reduced. It could also be a sign of a more serious condition developing. The elevated C-reactive Protein, LDH and ESR indicates mild nonspecific tissue injury and inflammation. It doesn't tell where, just that there is a problem and these values are good to monitor response to treatment. NOTE: Recent studies have shown that the CRP is one of the best markers for predicting the chances of a heart attack or stroke. A CRP close to zero is desired.

The Eosinophils are very high, the Monocytes and White Blood Count (WBC) are high, and the Platelets are a little low. Bacterial and viral infections will most commonly elevate WBC's initially, with more severe problems or chronic infections the WBC's reserves and productive capacity of bone marrow may be incapable of keeping up with demand, resulting in lower and lower WBC's, indicating a weakening immune system and slower healing. The Monocytes being high most likely suggest an immune deficiency, auto-immune imbalance, viral infection, or even food allergies. A food allergy test may be necessary. The high Monocytes and very high Eosinophils may be due to environmental allergies but would quite possibly indicate parasites.

### This finding is supported by:

Low Blood Phosphorus • Low Blood Total Protein • Low Blood Globulin • High Blood Creatine Kinase • High Blood LDH • High Blood SGOT (AST) • High Blood Triglyceride • High Blood CRP C-Reactive Protein • High Blood White Blood Count • Low Blood Platelets • High Blood Eosinophils • High Blood Creatinine

### This finding is associated with:

Presenting symptoms - Arthritic Disorder M12.9 • Indigestion K30 • Sinusitis J01.90 • Abdominal gas • Problems with Eczema • Frequent bladder infections • GERD K21.9 • Irritable Bowel • Edema R60.9  
Medications Taken - Coumadin • Lipitor • Prilosec • Naproxen Oral • Zetia • Hydrochlorothiazide • Acetaminophen • Glucophage

### Nutrients Recommended:

Citrus Q 10- 100mg • SBN CC Curcumin Complex 360

### MUTAGENIC CONSIDERATIONS

The very high Alkaline Phosphatase is commonly seen in bone and/or liver disease and/or biliary duct obstruction. This level may be associated with cancers. Further testing and retesting needs to be considered. The SBN Cancer Panel and Alkaline Phosphatase Isoenzymes are recommended now unless they have very recently been done and it is advised that the Alk Phos and other significant markers to be retested within 2-3 weeks. Note: if this is a child, youth or young adult, this high or very high Alk Phos reading is probably normal because of bone growth.

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**This finding is supported by:**

High Blood LDL Cholesterol • High Blood Uric Acid • Low Blood Total Protein • High Blood Creatine Kinase • High Blood LDH • High Blood GGT (r-GTP) • High Blood Ferritin • High Blood CRP C-Reactive Protein • High Blood White Blood Count • Low Blood Hemoglobin • High Blood Monocytes • High Blood Eosinophils • High Blood ESR-Erythrocyte Sed Rate, Westergren

**This finding is associated with:**

Medications Taken - Lipitor • Prilosec

**Nutrients Recommended:**

Glucosamine MSM • Vitamin C 1000mg

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**NOTED BLOOD VALUES**

The Glomerular Filtration Rate Estimated (eGFR) is optimal. The eGFR is a calculated estimate of the actual glomerular filtration rate and is based on your serum Creatinine concentration. The calculation uses formulas that may also include your age, gender, height, and weight. In some formulas, race may also be used in the calculation.

The kidneys filter blood and help control blood pressure. They remove waste and water and produce urine. eGFR is one of the best tests to indicate how healthy your kidneys are. It is important to know your eGFR because one may not be able to feel kidney damage.

Over 59-preferred

35 to 58-early kidney damage

16 to 34-moderate kidney damage

1 to 15 severe kidney damage

\* Please note that if your test result is less than 15, dialysis or transplant may be needed soon.

**This finding is associated with:**

Medications Taken - Glucophage

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**VERY LOW HAIR CHROMIUM**

The Chromium level in the hair is very low. Chromium is very important in carbohydrate and glucose metabolism and in the mechanism of insulin action. Basically, this mineral is very important for hypoglycemics and diabetics. Depletion can result in reduced metabolism of amino acids, glucose and lipid metabolism. It is also associated with protein malnutrition, elevated cholesterol levels, atherosclerosis and corneal damage.

**Nutrients Recommended:**

Vital Trace Minerals

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**HIGH HAIR CADMIUM**

The Cadmium level in the hair is high. Cadmium (Cd) is a toxic, heavy metal with no positive metabolic function in the body. It is relatively rare but it is more toxic than lead. Hair cadmium levels provide an excellent indication of body burden. Moderately high cadmium levels are consistent with hypertension, while very severe cadmium toxicity can cause hypotension. Recent studies have shown associations with cadmium and tumors of the lung, kidney, breast and prostate.

Cadmium also affects the kidneys, lungs, testes, arterial walls, and bones. It interferes with many enzymatic systems, leads to anemia, proteinuria and glucosuria and depletes glutathione, calcium, phosphorus and zinc. Cadmium absorption is reduced by zinc, calcium and selenium. Alkaline phosphatase is commonly elevated with cadmium toxicity. One of the things that you should do to help your overall long-term health is to reduce your cadmium intake.

The most common sources of cadmium are: refined foods (white flour, white sugar, etc.), acid drinks left in galvanized pails or ice trays, superphosphate fertilizers, gluten flour, some cola

- Possible sources of exposure or contamination are listed
- Common signs and symptoms are provided
- Treatment considerations

drinks, tap water, atmospheric pollution in the burning of coal and petroleum products, seafood, plastic water pipes, margarine, canned fruits and beverages, sugar and molasses, alcoholic drinks, cigarette smoke, zinc smelters, cadmium plating used in soft drink dispensing machines. Cadmium toxicity is common among welders and construction workers (cement dust). Contamination may come from perms, dyes, bleach and some hair sprays, and can cause false highs for cadmium.

Symptoms of Contamination: hypertension; fatigue; muscle and joint pain/osteomalacia; anemia; lumbar pain; learning disabilities, dyslexia, delinquency, schizophrenia, high anxiety, atherosclerosis; kidney damage with associated urinary loss of essential minerals, amino acids and protein.

#### Nutrients Recommended:

Chlorella Clean • SBN Calcium MCHC 250mg

#### NOTED HAIR VALUES

The Lead level in the hair is a little high. Clinical signs and symptoms: abdominal pain; colic; severe and repeated vomiting; irritability; hyperactivity; anorexia; loss of appetite; ataxia; mental disturbances. In advanced stage you may see signs of mental retardation; learning disability; speech disturbances; stupor or fatigue; intermittent fever; dehydration; constipation, diarrhea, nausea; altered sleep; epileptic seizures; headaches; poor memory; inability to concentrate; ADD/ADHD; aberrant behavior; decreased coordination; irritability; pain in abdomen, bones and muscles; gout; anemia and hair loss. Physiologically, the renal, nervous, reproductive, endocrine, immune, and hemopoietic systems are affected. Sub-toxic oral exposure to lead and cadmium increases the susceptibility to bacterial and viral infections.

Other symptoms associated with lead intoxication are: anemia; gastric distress; fatigue; weight loss; headaches; vertigo; tremor; joint pain; decreased coordination; neuritis; general mental symptoms; psychoneuroses; poor memory; constipation; inability to concentrate; colic; loss of appetite; loss of muscle strength; muscle tenderness; paresthesia and signs of neuropathy. Lead is known to damage the kidney, the liver, and the reproductive system. It also is known to interfere with bone marrow function, basic cellular processes and brain functions. It has been the cause of convulsions, abdominal pain, paralysis, temporary blindness, extreme pallor, loss of weight and appetite, constipation and numerous other problems. Lead causes nerve and mental problems, especially affecting learning ability in children. It was reported that the IQs of middle-class children dropped five to seven points after lead exposure, and Moon, et. al., demonstrated that lead levels are related to decreased visual and motor performance. Lead interferes with utilization of calcium, magnesium, vitamin D and zinc.

Therapeutic considerations: mild lead exposure can be treated successfully with oral chelating agents, targeted mineral therapy and dietary measures. The following should be considered: lead displaces calcium. In the case of calcium deficiency, lead is more readily deposited in tissues. Increases in phosphorus intake, vitamin C, vitamin B-complex, pectin, vitamin E, vitamins A, vitamin C, and chromium can avoid cellular damage and reduce lead levels. Inadequate vitamin D intake facilitates the absorption of lead.

Common sources of lead: lead based paints; older homes; crystal; ceramics; canned food; food crops; automobile emissions, lead smelting and lead-soldered cans, water contamination, newsprint, industrial pollution and some fertilizers.

The Selenium level in the hair is high. This is most often from external exposure, such as to dandruff shampoos. Toxicity can cause interference in the metabolism of sulfur-bearing amino acids, structural changes and red pigmentation of the hair and nails, garlic breath, metallic taste in the mouth, discoloration of teeth and skin, and gastroenteritis. High hair selenium is an accurate indicator of high serum levels.

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The information in this report has not been evaluated by the FDA and is not intended to treat, cure or prevent any disease.





The Barium level in the hair is a little high. Barium compounds are found in soaps, ceramics, paper, glass, plastics, textiles, dyes, fuel additives, rubber, paint and pesticides. Barium toxicity can cause vomiting, diarrhea, abdominal pain, muscular and myocardial stimulation, tingling in the extremities, and loss of tendon reflexes.

The Germanium level in the hair is high. This does not necessarily correlate with high levels of serum germanium.

The Aluminum level in the hair is a little high. Any aluminum is too much. Aluminum toxicity is associated with Alzheimer's and Parkinson's disease, behavioral/learning disorders such as ADD, ADHD and autism. Aluminum has neurotoxic effects at high levels, but low levels of accumulation may not elicit immediate symptoms. Early symptoms of aluminum burden may include fatigue, headache, and other symptoms. Aluminum is a heavy metal that displaces your other good minerals, such as magnesium, calcium, zinc and phosphorus. One of the things that you should do to help your overall long-term health is to reduce your aluminum intake. The most common sources of aluminum to avoid are: antiperspirants, aluminum cookware, antacids, some baking sodas, baking powder, some breath mints, pickles, some skin lotion, some cosmetics, aluminum foil, canned goods, emulsifiers in some processed cheese, table salt - anti-caking compound, bleaching agent used in white flour, buffered aspirin, some toothpaste, dental amalgams, cigarette filters, and drinking water (tap water). Do not eat or drink anything that comes in a can. Read your labels before you purchase. Aluminum has also been found in a granola bar. Prosthetic devices produced by Zimmer Company and Johnson and Johnson typically are made of aluminum, vanadium, and titanium, which might cause increased levels in the hair and/or urine.

Aluminum rods are commonly used in hot water tanks in area of acidic water. These rods will dissolve neutralizing the water, thus protecting the hot water tank. A rod of magnesium is an option for the same purpose.

Note: Fluoride and fluoridation increases the absorption of aluminum.

Chlorella and magnesium with malic acid have been reported to be quite effective in lowering aluminum.

The Arsenic level in the hair is a little high. Chronic arsenic exposure is known to cause: Bone marrow depression; leukopenia; normochromic anemia; exfoliation and pigmentation of skin; neurological symptoms; polyneuritis; altered hematopoiesis; liver degeneration; kidney degeneration; skin cancer; cancers of the respiratory tract; agitation; learning impairment; and confusion. Delayed toxicity symptoms include abdominal pain, nausea, vomiting, hematuria, and jaundice. Ingestion of relatively large amounts of soluble arsenic compounds, especially on an empty stomach, affect the myocardium, causing death within a few hours. Ingesting smaller amounts of arsenic can cause epigastric pain, vomiting and diarrhea, followed by inflammation of the conjunctiva and respiratory mucous membranes, epistaxis, transient jaundice, cardiomyopathy, erythematous or visceral rashes, and sweating. Other symptoms: malaise; muscle weakness; eczema; dermatitis; increased salivation; strong "garlic breath", alopecia totalis, vomiting, diarrhea and skin cancer. Hematological, renal, or pancreatic dysfunction may be observed. Symptoms of neuropathy are experienced typically appear as with tingling and paresthesia in the extremities. Proteinuria and methemoglobinemia are frequently observed, causing renal failure and death.

Arsenic can be absorbed by the human body through the respiratory and gastrointestinal tracts and through the skin. Arsenic is found in tobacco smoke and is a suspected causative factor in lung cancer. Metal smelting and the production of glass, ceramics, insecticides, fungicides and herbicides mobilize environmental arsenic. Drinking water may also be a source of arsenic, and



the use of arsenic-containing paints is a known source of arsenic poisoning. Elevated hair levels are seen long before acute clinical signs of arsenic toxicity are obvious. Therapeutic consideration for chronic overexposure: antioxidant therapy, especially ascorbic acid or calcium ascorbate, vitamin E (all tocopherols), increased intake of sulfur-containing amino acids, vitamin B6. Note: arsenic suppresses iodine and selenium. Research: the relationship between cognitive functions and hair mineral concentrations of lead, arsenic, cadmium, and aluminum was examined for a random selection of 69 children. The data obtained showed a significant correlation between reading and writing skill and elevated arsenic levels, as well as interaction between arsenic and lead. Children with reduced visual-motor skills, had clearly elevated aluminum and lead levels.

The Mercury (Hg) level in the hair is a little high. Mercury is a toxic element for humans and animals. Hair mercury level is an accurate indicator of mercury body burden. A considerable variance in the sensitivity of different individuals to mercury has been observed, with some exhibiting symptoms at 3 to 5 ppm. Even very low levels of mercury have been found to suppress biological selenium activity. After dental amalgams are used, elevated hair mercury may be observed for six months to over a year. Hair mercury has been found to correlate with acute myocardial infarction where on average a 1 ppm mercury was found to correlate with a 9 percent increase in acute myocardial infarction risk.

Mercury displaces selenium (which is a major anti-oxidant), zinc (protein, DNA and energy metabolism) and copper. Supplementation of magnesium, zinc, calcium, selenium, and manganese has been shown to be beneficial in relieving mercury loads.

Symptoms of acute contamination: metallic taste, thirst, discoloration and edema of oral mucosa, burning mouth pain, salivation, abdominal pain, vomiting, bloody diarrhea, severe gastroenteritis, colitis, nephrosis, anuria, uremia, shock.

Symptoms of chronic contamination: gingivitis; weakness; ataxia; intention tremors; chronic fatigue (caused by inhibition of thyroid conversion of T4 to T3); depression; poor memory and cognitive function; learning disabilities; behavioral disorders; emotional instability; speech impairment, irritability; peripheral numbness, tingling or neuropathy; sleep disturbance; decreased senses of touch; hearing or vision; hypersensitivity and allergies; persistent infections including chronic yeast overgrowth; compromised immune function; cardiovascular disease. It disrupts intracellular transport in neurons and can decrease the production of neurotransmitters. Eventually this can lead to autoimmune diseases such as SLE (systemic lupus erythematosus), myelinopathies such as MS and myasthenia gravis, rheumatoid arthritis, MCS (multiple chemical sensitivity), and chronic candidiasis. An inverse relationship has been observed between hair mercury levels and intelligence scores in elementary school children.

Other sources of mercury are: large fish, pesticide residues, mercurial fungicides on seed grains, dental fillings, coal burning, calomel (mercurous chloride), interior paints, pharmaceuticals, the manufacture of paper, pulp and plastic products, and water.

The Calcium level in the hair is a little high. High levels of calcium in the hair is most often associated with an imbalance of the calcium to phosphorus ratio in the body. Other causes include hyperparathyroidism and excess vitamin A or D intake. Excess calcium may depress nervous functions, and lead to depression, irritability, memory impairment, and psychosis.

The Sulfur level in the hair is a little low. The mineral sulfur is needed for the manufacture of many proteins, including those forming hair, muscles, and skin. Sulfur contributes to fat digestion and absorption, because it is needed to make bile acids. Sulfur is also a constituent of bones, teeth, and collagen (the protein in connective tissue). As a component of insulin, sulfur is needed to regulate blood sugar. Most dietary sulfur is consumed as part of certain amino acids in





protein-rich foods. Meat and poultry, organ meats, fish, eggs, beans, and dairy products are all good sources of sulfur-containing amino acids. Sulfur also occurs in garlic and onions.

**Nutrients Recommended:**

Chlorella Clean • MagMalic • Multiple Vitamin • SBN Calcium MCHC 250mg • Vital Trace Minerals



## LIFESTYLE & DIETARY RECOMMENDATIONS

### DIET FOCUS

Food can be broken down into basically two categories:

1. Energy (calories from fat, carbohydrates and protein)
2. Nourishment (the nutrient density of the food; vitamin and mineral content).

When planning your meals, use this thought process:

1. Get at least 2 vegetables with each meal. Fruit should be limited only if you have glucose handling issues. However, always consume more vegetables than fruits.
2. Proteins: 25-35% of the meal needs to be of a protein source.
  - > Focus on good quality protein and not the processed protein bars, drinks, and powders.
  - > Most desirable proteins: meats (like chicken, fish, turkey and even red meat), eggs, beans, seeds, nuts, sprouts, quinoa, nut butters (ie. peanut butter, cashew butter, almond butter).
  - > Eliminate these least desirable proteins: processed soy, processed dairy, pork, processed luncheon meats (those that contain "nitrates" or "nitrites").
3. Carbohydrates: 40-60% of your meal needs to be carbohydrate.
  - > Most desirable carbohydrates sources: whole grain breads, pastas (including egg noodles), and rice, whole vegetables, whole fruit
  - > Eliminate these least desirable carbohydrates: white sugar, white flour, fruit juice, high fructose corn syrup, chips, French fries, pop/soda
4. Fats: Your meal should contain anywhere from 15-25% fat.
  - > Most desirable fat sources: nuts (cashews, almonds, pecans, walnuts, Brazil nuts (raw and unsalted are preferred), seeds (sunflower seeds, pumpkin seeds), avocados, coconut oil, fish, nut butters (peanut butter, almond butter, etc)
  - > Desirable Cooking Oils: Grape Seed Oil, Olive Oil, Coconut Oil, Palm Oil
  - > Eliminated these least desirable fat sources: anything with trans-fat (AKA: hydrogenated fat), interesterified fat or Olestra. Bacon, sausage, etc.
  - > Strictly avoid hydrogenated/trans-fats: About 80% of trans fats in your diet come from processed foods, fast food, primarily snack foods and desserts.
5. Special instructions may be given based upon certain metabolic conditions such as cancer, diabetes, kidney disorders etc.

You can customize these recommendations for each patient



You can also customize these recommendations for each patient

#### IDENTIFYING LOW NUTRIENT DENSE FOODS

Below is a list of foods and items that will help you identify low nutrient dense foods and cooking/storage processes that lower the nutrient density in foods. Pay close attention to the ingredient labels. The following are recommend to avoid.

1. Artificial Sweeteners: "aspartame", "saccharin", "sucralose", "acesulfame potassium", "sorbitol", "maltitol", etc.
2. Flavor Enhancers and Preservatives: "MSG", "monosodium glutamate", "nitrate" or "nitrite" ingredients found in many dressings, sauces, Chinese foods, processed meats, pork products, bologna, some wieners, and many luncheon meat. HVP (hydrolyzed vegetable protein) and processed soy proteins can contain up to 40% MSG.
3. Artificial colors and dyes: look for terms such as "FD&C", "lake", "red", "yellow", etc. Read your supplement labels carefully.
4. Canned Foods and Drinks: choose fresh or frozen varieties. Limit canned food consumption to canned beans and tuna. Foods stored in glass are acceptable.
5. Microwave Cooking and Deep Frying lower the nutrient density more so than stove top cooking.
6. Artificial Fats: "hydrogenated" [a.k.a. "trans fat"] and "interesterified" fats are found in margarine, many pre-packaged foods, supplements, and dressings; avoid "Olestra" containing products.
7. Refined Carbohydrates: processed foods such as white sugar, white flour, corn syrup, "enriched" foods, etc.
8. Commercial Meats: Try to get the cleanest, freshest meat you can find. Look for meat that is labeled with terms such as "No Hormones", "No Antibiotics", "Free Range", "Organic", etc.
9. Shellfish and Bottom-feeders: crab, shrimp, lobster, oyster, catfish, etc.
10. Dairy Products: cottage cheese, yogurt, cheese, sour cream, etc. (anything with cow's milk). This does not include eggs.
11. Coffee (regular & chemically decaffeinated), Liquor (distilled), All sodas, Tea (black decaf & black regular). Organic herbal teas are acceptable.
12. Soy Products: isolated soy protein, texturized vegetable protein, soy supplements, soy protein powder, soy protein bars, tofu, etc. Limited fermented soy products (tempeh and miso) and whole soy beans are acceptable. Don't make soy your main protein source, limit to 3-4 servings per week.
13. Chlorine and Fluoride Sources: tap water, heavy chlorine exposure in swimming pools, fluoride toothpaste, fluoride supplements, fluoride mouthwash, etc.

#### DIABETIC RECOMMENDATIONS

1. Avoid all fruit juices.
2. Eat only one fruit and at least four fresh vegetables per day.
3. Eat a snack every hour and a half to two hours.
  - > Eat by the clock. This is going to help take stress off your liver and maintain your glucose at a good level so it doesn't fluctuate so much.
  - > The snack should be 4 to 5 bites of a complex carbohydrate, protein or foods that have healthy fats in them such as: sunflower seeds, pumpkin seeds, nuts, carrots with hummus or a few bites of chicken would be fine to eat.
4. Do this for at least the next two months or until your evaluation.



You can also customize these recommendations for each patient

#### AEROBIC EXERCISE

Examples of aerobic exercise are jogging, cycling, elliptical trainer, fast-paced walking, etc. It is recommended that you build up to at least 40 minutes a day. If at first you do not have the energy to exercise this much, it is recommended that you start slowly by exercising 10 minutes two or three times a day until you can gradually build up to 40 minutes a day.

#### STRENGTH TRAINING

If you are not currently on a weight training program, a muscle building exercise (i.e. step exercise) 10 minutes a day is encouraged. If at first you do not have the energy or physical ability to perform this exercise, it is recommended that you start slowly by setting a goal to do this exercise 2 minutes two or three times a day until you can gradually build up to 10 minutes a day.

#### WATER CONSUMPTION

Drink 1 quart of clean, filtered water per 50lbs of body weight per day. Do not go over 3 quarts regardless of your weight. More water might be necessary depending on exercise, environment and perspiration. We recommend using a multiple filtration system for your drinking and cooking water. There are several types of these, which include reverse osmosis. Distilled water is not recommended. Since distilled water has little or no mineral content, it acts like a vacuum that can actually leach minerals from your system.

A word of caution - anytime you make drastic changes in diet, vitamin intake, or exercise, realize that you may feel somewhat worse before you feel better. It doesn't happen often, but as your body detoxifies, you may feel worse if it occurs too fast. If you do feel worse, don't panic, it will pass in a few days. If this problem does occur, take half of what is recommended for three days and slowly over two weeks progress to taking the complete program.

Everything that has been recommended is very important and many of these things work together. In order to get the most effective results, it is important that you follow the program exactly as outlined. Following the diet may not be easy, but if you do, you will get the best outcome. Likewise, if you don't take the vitamins, or only take part of them, you may not see the expected results. Many people with some very serious problems have been helped using this program. The purpose of this analysis is to benefit you. This is for your well being, so please do the program as recommended so that you will achieve the best results.

Attached is a list of supplements that have been carefully selected for your specific problems. All supplement dosages should be spread throughout the day and taken with food unless otherwise suggested. These supplement brands are recommended because they are of the highest quality. It might seem that a lot of vitamins are recommended, but the number of vitamins is only an indication of how sick you are. It is unreasonable to need this number of vitamins very long, but you need them now. The closer you follow the program, the better results you will likely have and the number of vitamins will go down with improvement. Occasionally, you will hear rumors regarding vitamin toxicity. Rest assured that these issues have been researched and the risk of significant side effects is extremely low. Historical data and experience have shown these supplements, along with the dietary changes, to be the best in helping you achieve the necessary improvements needed on your test results.

Please keep this report for future reference and bring it with you to your next evaluation.

If we can be of any further assistance to you or your family please do not hesitate to ask.



Name: Ann Onymous			Lab: LabCorp			Blood Test Results		
Legend: <span>Warning</span> <span>High Risk</span>			<span>Critical</span>	<span>Optimal</span>	<span>Improvement</span>	<span>Worse</span>	<span>No Improvement</span>	
Test Description	Current Rating		Prior	Delta	Healthy	Clinical	Units	
	02/22/2019		04/15/2018					
Glucose	122.000	High	178.000	⊖	80.000 - 95.000	65.000 - 99.000	mg/dL	
Hemoglobin A1C (Gly-High)	7.100	High	8.700	⊖	4.800 - 5.605	4.500 - 6.405	%	
Uric Acid	8.100	High	5.600	⊖	3.500 - 6.600	2.500 - 7.100	mg/dL	
BUN (Blood Urea Nitrogen)	26.000	High	28.000	⊖	8.000 - 18.000	6.000 - 24.000	mg/dL	
Creatinine	2.500	Very High	3.200	⊖	0.700 - 0.870	0.570 - 1.000	mg/dL	
GFR Est.	66.000	*	70.000		59.000 - 145.000	45.000 - 150.000	uL/min/1.7	
BUN / Creatinine Ratio	18.480	*	21.000	⊖	12.000 - 19.000	9.000 - 23.000	ratio	
Sodium	141.000	*	139.000		139.000 - 143.000	134.000 - 144.000	mmol/L	
Potassium	4.110	*	4.100		3.800 - 4.500	3.500 - 5.200	mmol/L	
Chloride	94.000	Low	90.000	⊖	102.000 - 105.000	96.000 - 106.000	mmol/L	
Calcium	9.400	*	9.300		9.200 - 9.710	8.700 - 10.200	mg/dL	
Phosphorus	0.000	Very Low	3.900	⊖	3.400 - 3.900	3.000 - 4.300	mg/dL	
Magnesium	2.500	High	2.200	⊖	1.900 - 2.200	1.600 - 2.300	mg/dL	
Total Protein	6.170	low	5.950	⊖	7.100 - 7.610	6.000 - 8.500	g/dL	
Albumin	4.700	high	3.550	⊖	4.200 - 4.500	3.800 - 4.900	g/dL	
Globulin	1.470	Low	1.400	⊖	2.800 - 3.510	1.500 - 4.500	g/dL	
A/G Ratio	1.230	*	1.220		1.200 - 1.600	1.100 - 2.500	ratio	
Total Bilirubin	0.440	*	0.520		0.300 - 0.900	0.000 - 1.200	mg/dL	
Alk. Phosphatase	180.000	Very High	210.000	⊖	64.740 - 91.260	39.000 - 117.000	IU/L	
Creatine Kinase	134.000	high	150.000	⊖	81.500 - 132.500	32.000 - 182.000	U/L	
LDH	250.000	High	311.000	⊖	138.880 - 190.700	119.000 - 226.000	IU/L	
SGOT (AST)	32.000	high	65.000	⊖	10.000 - 26.000	0.000 - 40.000	IU/L	
SGPT (ALT)	40.000	High	70.000	⊖	8.000 - 26.000	0.000 - 32.000	IU/L	
GGT (r-GTP)	50.000	high	66.000	⊖	10.000 - 35.000	0.000 - 60.000	IU/L	
Serum Iron	121.000	high	31.000	⊖	71.000 - 115.000	27.000 - 159.000	ug/dL	
Ferritin	320.000	Very High	430.000	⊖	45.000 - 110.000	15.000 - 150.000	NG/mL	
Total Cholesterol	220.000	High	227.000	⊖	150.000 - 180.000	100.000 - 199.000	mg/dL	
Triglyceride	215.000	High	85.000	⊖	50.000 - 150.000	0.000 - 200.000	mg/dL	
HDL Cholesterol	63.000	*	43.000	⊖	50.000 - 150.000	40.000 - 200.000	mg/dL	
VLDL Cholesterol	18.000	*	17.000		6.000 - 20.000	5.000 - 40.000	mg/dL	
LDL Cholesterol	114.000	High	111.000	⊖	50.000 - 75.000	0.000 - 99.000	mg/dL	
Total Cholesterol / HDL Ratio	3.490	*	5.200	⊖	0.000 - 4.000	0.000 - 4.400	ratio	
TSH	5.200	High	2.300	⊖	0.500 - 3.500	0.450 - 4.500	uIU/mL	
T4 Thyroxine	4.200	Low	9.800	⊖	7.100 - 9.000	4.500 - 12.000	ug/dL	
T3 Uptake	31.000	*	29.000		29.000 - 35.000	24.000 - 39.000	%	
T7 (Free T4 Index) (FTI)	1.100	Low	2.800	⊖	2.610 - 3.600	1.200 - 4.900		
T3 Free (Triiodothyronine)	1.500	Low	0.120	⊖	2.600 - 3.800	2.000 - 4.400	pg/mL	
CRP C-Reactive Protein	11.000	High	13.000	⊖	0.000 - 6.700	0.000 - 10.000	mg/L	
White Blood Count	12.000	High	3.800	⊖	5.700 - 8.500	3.400 - 10.800	k/cumm	
Red Blood Count	3.800	low	3.800	⊖	4.270 - 4.780	3.770 - 5.280	m/cumm	
Hemoglobin	11.700	low	10.200	⊖	12.600 - 14.500	11.100 - 15.900	g/dL	
Hematocrit	37.000	low	32.400	⊖	38.000 - 42.000	34.000 - 46.600	%	
MCV	91.000	*	89.000		84.000 - 92.000	79.000 - 97.000	fL	
MCH	30.200	*	30.900		28.600 - 31.000	26.600 - 33.000	pg	
MCHC	34.500	*	37.000	⊖	33.200 - 34.500	31.500 - 35.700	g/dL	
RDW	14.100	*			12.900 - 14.200	11.700 - 15.400	%	
Platelets	220.000	low	170.000	⊖	250.000 - 350.000	150.000 - 450.000	x10E3/uL	
Polys/Neutrophils (SEGS-PMNS)	52.000	*	68.000	⊖	51.000 - 63.000	40.000 - 74.000	%	
Lymphocytes	24.000	*	23.000	⊖	24.000 - 36.000	14.000 - 46.000	%	
Monocytes	14.000	High	6.000	⊖	5.000 - 7.000	4.000 - 13.000	%	
Eosinophils	8.000	Very High	3.620	⊖	0.000 - 3.500	0.000 - 5.000	%	
Basophils	0.090	*	1.000		0.000 - 2.000	0.000 - 3.000	%	
ESR-Erythrocyte Sed Rate, Westergren	27.000	high	38.000	⊖	0.000 - 10.000	0.000 - 40.000	mm/hr	
Vitamin D 25-Hydroxy (total)	45.000	low	12.000	⊖	50.000 - 90.000	30.000 - 100.000	ng/mL	

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The information in this report has not been evaluated by the FDA and is not intended to treat, cure or prevent any disease.



Name: Ann Onymous

Lab: LabCorp

Blood Test Results

Legend: ■ Warning ■ High Risk ■ Critical

	06/13/2017	03/17/2016	Prior Results		
			04/15/2015	05/10/2014	
Glucose	93.000	98.000	96.000	99.000	
Hemoglobin A1C (Gly-Hgh)	6.700	4.000		5.600	
Uric Acid	5.300	4.000		5.500	
BUN (Blood Urea Nitrogen)	17.000	21.000		20.000	
Creatinine	0.790	1.200		1.000	
GFR Est.	66.000				
BUN / Creatinine Ratio	18.480			20.000	
Sodium	141.000	138.000		139.000	
Potassium	4.110	3.800		4.000	
Chloride	98.000	101.000		103.000	
Calcium	9.400	9.500		9.300	
Phosphorus	0.000	3.800		3.800	
Magnesium	2.300	2.400		2.200	
Total Protein	6.200	7.800		7.800	
Albumin	4.000	4.300		4.100	
Globulin	2.200	3.500		3.700	
A/G Ratio	1.230			1.100	
Total Bilirubin	0.440			0.500	
Alk. Phosphatase	77.000	90.000	200.000	68.000	
Creatine Kinase	134.000	125.000			
LDH	87.000		44.000	135.000	
SGOT (AST)	32.000	50.000	70.000	40.000	
SGPT (ALT)	40.000		70.000	55.000	
GGT (r-GTP)	50.000	55.000	200.000	70.000	
Serum Iron	121.000	80.000		110.000	
Ferritin	320.000	10.000		4.000	
Total Cholesterol	188.000	200.000		215.000	
Triglyceride	84.000	150.000		82.000	
HDL Cholesterol	63.000	50.000		45.000	
VLDL Cholesterol	18.000	10.000		30.000	
LDL Cholesterol	87.000	140.000		140.000	
Total Cholesterol / HDL Ratio	3.000	4.000		5.000	
TSH	5.200				
T4 Thyroxine	4.200			8.000	
T3 Uptake	31.000			31.000	
T7 (Free T4 Index) (FTI)	1.100			2.400	
T3 Free (Triiodothyronine)					
CRP C-Reactive Protein	1.400	10.000		22.000	
White Blood Count	5.800	11.000		7.400	
Red Blood Count	4.200	2.200		2.900	
Hemoglobin	11.700	9.500		14.000	
Hematocrit	37.000	31.000		44.000	
MCV	91.000	90.000		89.000	
MCH	30.200	31.000		30.000	
MCHC	34.500	35.000		34.000	
RDW					
Platelets	220.000	280.000		268.000	
Polys/Neutrophils (SEGS-PMNS)	52.000			55.000	
Lymphocytes	24.000			54.000	
Monocytes	6.200			6.000	
Eosinophils	3.200			4.000	
Basophils	0.090			1.000	
ESR-Erythrocyte Sed Rate, Westergren	8.000	20.000		33.000	
Vitamin D 25-Hydroxy (total)	45.000				

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The information in this report has not been evaluated by the FDA and is not intended to treat, cure or prevent any disease.



Name: Ann Onymous		Lab: Doctor's Data #1. (with Ranges)				Hair Test Results	
Legend: <span>Warning</span> <span>High Risk</span> <span>Critical</span> <span>Optimal</span> <span>Improvement</span> <span>Worse</span> <span>No Improvement</span>							
Test Description	Current Rating 02/20/2019	Prior 04/15/2018	Delta	Healthy	Clinical	Units	
Toxic Elements							
Aluminum	3.800 high	12.000	⊖	0 - 2.200	2.210 - 7.000	ug/g	
Antimony	0.020 ★	0.050	⊖	0 - 0.022	0.032 - 0.050	ug/g	
Arsenic	0.040 high	0.130	⊖	0 - 0.032	0.042 - 0.060	ug/g	
Barium	2.000 high	2.120	⊖	0 - 1.501	1.511 - 2.001	ug/g	
Beryllium	0.000 ★	0.000		0 - 0.015	0.025 - 0.021	ug/g	
Bismuth	0.100 ★	0.100		0 - 1.000	1.010 - 2.000	ug/g	
Cadmium	0.080 High	0.100	⊖	0 - 0.031	0.041 - 0.051	ug/g	
Lead	0.400 high	5.000	⊖	0 - 0.401	0.411 - 0.601	ug/g	
Mercury	0.770 high	4.000	⊖	0 - 0.500	0.510 - 0.801	ug/g	
Platinum	0.000 ★	0.000		0 - 0.003	0.013 - 0.005	ug/g	
Thallium	0.000 ★	0.000		0 - 0.001	0.011 - 0.002	ug/g	
Thorium	0.000 ★	0.000		0 - 0.001	0.011 - 0.002	ug/g	
Uranium	0.010 ★	0.900	⊖	0 - 0.020	0.030 - 0.060	ug/g	
Nickel	0.210 ★	0.300	⊖	0 - 0.251	0.261 - 0.301	ug/g	
Silver	0.090 ★	0.140	⊖	0 - 0.101	0.111 - 0.151	ug/g	
Tin	0.220 ★	0.250		0 - 0.291	0.301 - 0.301	ug/g	
Titanium	0.300 ★	0.600	⊖	0 - 0.401	0.411 - 0.701	ug/g	
Total Toxic Representation	2.000 ★	3.000	⊖	0 - 2.004	2.014 - 3.000	ug/g	
Essential Elements							
Calcium	1000.000 high	2701.000	⊖	663.000 - 753.000	300.000 - 1200.000	ug/g	
Magnesium	98.000 high	290.000	⊖	53.000 - 62.000	35.000 - 120.000	ug/g	
Sodium	60.000 low	65.000	⊖	95.001 - 174.001	20.001 - 250.001	ug/g	
Potassium	17.000 low	19.000	⊖	30.001 - 53.001	8.001 - 75.001	ug/g	
Copper	19.000 ★	90.000	⊖	18.001 - 29.001	11.001 - 37.001	ug/g	
Zinc	142.000 low	150.000	⊖	150.001 - 170.001	140.001 - 220.001	ug/g	
Manganese	0.500 high	0.500	⊖	0.281 - 0.401	0.081 - 0.601	ug/g	
Chromium	0.280 Very Low	0.550	⊖	0.481 - 0.571	0.401 - 0.651	ug/g	
Vanadium	0.040 ★	0.019	⊖	0.035 - 0.045	0.018 - 0.065	ug/g	
Molybdenum	0.040 ★	0.250	⊖	0.031 - 0.041	0.021 - 0.051	ug/g	
Boron	1.400 high	1.000	⊖	0.761 - 1.201	0.250 - 1.501	ug/g	
Iodine	0.450 low	1.500	⊖	0.761 - 1.301	0.250 - 1.801	ug/g	
Lithium	0.010 ★	0.010		0.010 - 0.016	0.007 - 0.020	ug/g	
Phosphorus	169.000 ★	160.000	⊖	173.001 - 197.001	150.001 - 220.001	ug/g	
Selenium	1.200 High	0.620	⊖	0.621 - 1.031	0.551 - 1.101	ug/g	
Strontium	2.500 ★	0.640	⊖	2.000 - 2.900	0.500 - 7.600	ug/g	
Sulfur	45252.000 low	65000.000	⊖	46000.000 - 48000.000	44000.000 - 50000.000	ug/g	
Cobalt	0.020 ★	0.005	⊖	0.018 - 0.028	0.004 - 0.041	ug/g	
Iron	7.800 low	7.500	⊖	9.001 - 13.001	7.001 - 16.001	ug/g	
Germanium	0.050 High	0.500	⊖	0.031 - 0.039	0.030 - 0.040	ug/g	
Rubidium	0.030 ★	0.009	⊖	0.020 - 0.032	0.007 - 0.096	ug/g	
Zirconium	0.110 ★	0.300	⊖	0.070 - 0.250	0.020 - 0.420	ug/g	



Vitamin dosages are based on:

1. Actual test results
2. Age
3. Sex
4. Weight
5. Medications

#### VITAMIN AND SUPPLEMENT RECOMMENDATIONS

SUPPLIER: #1 SBN/Merkle Vitamin Line

PATIENT: Ann Onymous

SEX: F

AGE: 53

WEIGHT: 145

Other suppliers are available

<u>Supplement</u>	<u>Number Per Day</u>
A-Potene 25,000IU	1
B6 100mg	2
Bio-Dophilus	1
Chlorella Clean	4
Citrus Q 10- 100mg	2
Garlic 500mg	2
Glucosamine MSM	2
Glucoset	2
L-Arginine 700mg	1
Lauricidin	2
Lipogen	2
MagMalic	2
Methyl B12 Select	3
Multiple Vitamin	2
Opti EPA	1
Pantothenic Acid 500mg	2
SBN Betaine Plus	3
SBN Calcium MCHC 250mg	2
SBN CC Curcumin Complex 360	4
Silymarin 80 (Milk Thistle)	4
Vital Trace Minerals	2
Vitamin C 1000mg	3
Vitamin D 5000IU	1

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Transfer 'Working Copy' recommendations into Final Copy Template. This template is available to all SBN Members. **Currently there is an additional cost for this.**

Final Copy of Nutrient Recommendations

Vitamins

Personal Vitamin and Supplement Program For:

Daily Doses

Ann Onymous

Quantities

Prices

2 Month Supply

Vitamin or Supplement	Dosage Per Day	AM	NOON	PM	BED	Bottles	Quantity	Price	Extended Price
1 Calcium MCHC	750 mg.	1	1	1		1	250 @	\$24.35	\$24.35
2 Chlorella Clean	1000 mg.	2		2		1	180 @	\$22.90	\$22.90
3 Inflationoid (Turmeric)	900 mg.	1		1		1	180 @	\$31.68	\$31.68
4 Iron Peptonate [Ferrotate Jr]	25 mg.	1				1	100 @	\$16.04	\$16.04
5 Mag Malic	2	1		1		1	180 @	\$21.43	\$21.43
6 Natural Vit E Complex	400 I.U.	1				1	100 @	\$12.62	\$12.62
7 Opti EPA (Fish Oil)	500 mg.				1	1	60 @	\$14.62	\$14.62
8 Silymarin (Milk Thistle Extract)	450 mg.	1	1	1		1	90 @	\$14.60	\$14.60
12 Vital Trace Minerals	2	1		1		1	180 @	\$16.83	\$16.83
9 Stress B Plus (B-Complex)	50 mg.	1				1	90 @	\$11.36	\$11.36
10 Sublingual B12FA	3	1	1	1		1	180 @	\$11.68	\$11.68
11 Ultra Preventive III (Multiple)	2	1		1		1	180 @	\$24.30	\$24.30
13 Vitality C Pwdr + Ribose	See Instructions Below					1	31 @	\$42.88	\$42.88

Specialty / Instructions

Specialty Instructions

Mix 1 teaspoon of powder with 8 ounces of water, take with your morning meal and duplicate for evening meal.

Sub Total	\$265.29
Tax	\$18.57
<b>Total</b>	<b>\$285.19</b>

Total

Supplements Must Be Paid In Full Upon Receipt  
Take All Supplements With Meals Unless Otherwise Noted

Wednesday, February 03, 2010

Page 1 of 1

# THE FOOD DIARY

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THE MAIN THING GOING OVER THE REPORT:

KEEP IT SIMPLE

**DO WHAT THE REPORTS SAYS!!**

- The doctor does a 'show and tell'
- These are the problems you have.
- This is what you need to fix them.
- You can buy these at a health food store.
- You can also get the vitamins here, **these are the ones we have experience with and have shown to do the job.**
- "Would you like to buy some vitamin now?"
- The main thing is retesting to make sure whatever you take is working.



# THE KEY TO COMPLIANCE

- It is the initial objective testing, comprehensive report and Vision or **anticipation of improvement that drives compliance**. Now patients have an objective outcome that they can see with retesting.
- **Now they are motivated** to:
  - Take the vitamins
  - Follow the diet
  - To retest



## KEY POINT:

## PATIENTS DO WANT TO GET BETTER

**This is why they came to you in the first place.**

- If your patients are not doing the testing, not taking the vitamins or retesting then it is obvious that they have not been convinced of your ability to help them. They may let you down easy and say that they can't afford it, but rarely is that truly the case.
- This is difficult for most doctors to accept. They usually blame the patients instead of looking at themselves and what they are doing.



# PATIENT QUESTIONS:

- What does the 'Red' SGOT mean?
- What does anemia mean?
- Why am I taking Chlorella?
- What am I taking for anemia?
- Where am I getting arsenic?
- Are the drugs I'm on causing problems?
- How much calcium do I need?
- What can or can't I eat?
- Do I need all of these vitamins?
- How long will I need these vitamins?

“The answers are all in the report. I don't expect you to remember it all, which is why we wrote it all down for you. Go home and read over it a couple of times and “I” will call you in a couple of days to answer your questions.”



# GETTING STARTED: DO THE UA

- Rule out: serious infection, possible kidney and liver disease, diabetes, etc.

# CBC

- Major function of RBC: transport hemoglobin which carries oxygen from lungs to tissues and carbon dioxide from the tissues to the lungs.
- Hemoglobin (**protein**): when free in the plasma (due to rupture or destruction of RBC's) ~3% is lost through the kidney.
- Hemoglobin in RBC's is responsible for ~ **70% of acid-base buffering power** of whole blood.
- RBC is a “bag” that can be deformed into almost any shape, this does not stretch the membrane and consequently does not rupture the cell.
- Middle trimester of gestation: liver is main producer of RBC', some produces in the spleen and lymph nodes.
- Latter gestation and after birth, RBC produced exclusively by bone marrow.



# CBC

## Red Blood Cell Count:

- Bone Marrow of all bones produce RBC's till age 5.
- After age 20 only marrow of membranous bones of vertebrae, sternum, ribs and pelvis produce RBC.
- Important point: Marrow that has already stopped producing red blood cells can once again become productive, and marrow that is still producing red blood cells becomes greatly hyperplastic and produces far greater than normal quantities. Even the spleen and liver may re-establish their ability to produce RBC's when extreme stimuli persist for prolonged periods of time.
- Primordial Stem cells continually make hemocytoblasts which continually make RBC's.
- The hemocytoblast like the Stem cell can reproduce itself again and again.
- **Tissue oxygenation determines RBC production.**

# CBC, ANEMIA AND KIDNEY

## Erythropoietin:

- Believed to be released by the kidney in response to hypoxia.
- Stimulates the bone marrow to produce RBC's.
- Without kidneys, chronic advanced anemia develops due to extremely low levels of circulating erythropoietin.
- With extreme quantities of erythropoietin, RBC production can rise to 10 times normal.
- Many Cancer patients who have chemo and/or radiation will be given erythropoietin in a drug called Procrit or Epogen.
- Procrit and Epogen are produced by mammalian cells into which the human erythropoietin gene has been introduced (Recombinant DNA), also has human albumin.

# EPOGEN/PROCRIT/ARANESP

Subject: FDA MedWatch- Erythropoiesis Stimulating Agents- Studies Indicate Increased Mortality And More Rapid Tumor Progression In Patients With Cancer Receiving ESAs

Amgen and FDA notified healthcare professionals of changes to the Boxed Warnings/WARNINGS: Increased Mortality and/or Tumor Progression section of the Aranesp and EPOGEN/PROCRIT labeling to update the clinical studies showing that ESAs shortened overall survival and/or time to tumor progression in clinical studies in patients with breast, non-small cell lung, head and neck, lymphoid, and cervical cancers when dosed to target a hemoglobin of  $\geq 12$  g/dL.

Read the complete 2008 MedWatch Safety Summary including a link to the manufacturer's Dear Healthcare Professional Letter regarding this issue at:

<http://www.fda.gov/medwatch/safety/2008/safety08.htm#ESA>



# -Focus on Elements -

## Red Blood Count

**Clinical range** 4.4 -5.6

**Healthy range** 4.5-5.5.

**Anisocytosis-** variation in size of RBC's.

### **DECREASED in:**

- Bleeding
- Hemolysis
- Deficient marrow production
- Anemias
- Pernicious anemia- deficiency of B12 and folic acid
- Chronic kidney disease
- Chronic liver disease

### **Environmental:**

- Lead poisoning
- Organic phosphate pesticides: Diazinon, Malathion and carbamates (carbaryl)

### **INCREASED in:**

- Smoking
- Polycythemia vera
- Renal cyst
- Renal carcinoma
- Chronic inflammatory disease
- Collagen disease
- Vascular disease
- Postoperative
- Postpartum
- High altitudes
- Exercise

**Drugs:** NSAIDS

**Drugs:** Procrit or Epogen

### **Nutrient Recommendations:**

B12, Folic Acid, minerals, iron



# NUTRIENTS NECESSARY FOR RBC PRODUCTION:

- Iron
- Methylcobalamine B12
- Folic acid
- Copper
- Pyridoxine B6
- Cobalt Note: nickel can displace cobalt
- Amino acids
- L-Carnitine
- Specialty formulas
  - Sublingual B12 Plus Folic Acid - Douglas Labs
  - Ferronyl 9mg – Douglas Labs



# - Focus on Elements - Hemoglobin

**Clinical range** 12.5 -16gm/dl

**Healthy range** 14 -15mg/dl

Measured amount of intra-cellular iron to evaluate anemia, blood loss, hemolysis, polycythemia and other conditions.

**CRITICAL RANGE:** less than 5gm/dl and over 18gm/dl.

## **DECREASED in:**

- Anemia
- Pregnancy
- Chronic Lymphocytic Leukemia
- Multiple myeloma
- Acute rheumatic Fever
- Thrombotic Thrombocytopenic Purpura

## **Drugs:**

**Nutrients to consider: iron**

## **INCREASED in:**

- **Hemochromatosis**
- Dehydration
- Polycythemia
- Cardiovascular disease
- Risk of stroke
- Increased morbidity
- Alcoholics
- Hyperlipidemia

# - Focus on Elements -

## Hematocrit

**Clinical range** 38 - 49%

**Healthy range** 40 - 47%.

Percent of whole blood that is red blood cells.

**CRITICAL RANGE:** less than 15% and over 60%.

Note: 51% or higher has been noted to increase the risk of stroke. Very high levels are associated with increased morbidity and mortality from cardiovascular disease.

### **DECREASED in:**

- Anemia
- Blood loss
- Hemolytic anemia
- Congestive heart failure
- Pancreatitis
- Pregnancy

### **INCREASED in:**

- Hemochromatosis
- Dehydration
- Polycythemia

**Nutrients to consider:** B12 and folic acid





**So cool, the Tooth Fairy  
was drunk last night!!!**



**Guess who kept everyone  
awake last night?**



# - Focus on Elements -

## MCV

**Clinical range** 82 - 99cu.m

**Healthy range** 85 - 97cu.m.

Mean corpuscular volume is the size (volume) of the average red cell.

**When new red blood cells are formed they are larger and will have an increased MCV, MCH and MCHC, as they age, they shrink and get smaller reducing these values.**

### **DECREASED in:**

- (microcytosis- microcytic anemia)
- Chronic hemodialysis
- Intracellular iron deficiency
- Anemia of chronic disease
- Thalassemia syndrome
- Pyridoxine deficiency

### **Environmental:**

- Aluminum toxicity
- Lead poisoning

### **Nutrients to consider:**

- B6 (pyridoxine) and iron

### **INCREASED in:**

- (macrocytosis macrocytic anemia)
- B12/folate deficiency
- Pernicious anemia
- Alcoholics
- Diabetic ketoacidosis
- Cell dehydration

### **Drugs:**

- Zidovudine (AZT) treatment of AIDS

### **Nutrients to consider:**

- B12 and folic acid



# - Focus on Elements -

## MCH

**Clinical range** 27.50 - 32.50pg

**Healthy range** 27.00 - 31.00pg.

Mean corpuscular hemoglobin is the weight of hemoglobin in the average red cell.

### **DECREASED in:**

- Iron deficiency anemia

### **Nutrients to consider:**

- Iron, B12 and folic acid

### **INCREASED in:**

- Pernicious anemia
- B12/folic acid deficiency
- Chronic inflammation
- Acute blood loss
- Polycythemia
- Alcoholics
- Hereditary spherocytosis

# - Focus on Elements -

## MCHC

**Clinical range** 32.00 - 36.00%

**Healthy range** 32.00 - 34.00%.

Mean corpuscular hemoglobin concentration is the amount of hemoglobin present in the average red cell as compared to its size.

### **DECREASED in:**

- Iron deficiency anemia

### **INCREASED in:**

- Pernicious anemia
- B12/folic acid deficiency
- Hereditary spherocytosis
- Chronic inflammation
- Acute blood loss
- Polycythemia

# RDW RANGES

- Clinical 13-15%; Healthy 13.5-14.5; Critical 11-17
- RDW stands for red cell distribution width.
- It is a measure of variability or non-uniformity in erythrocyte size across a given sample. The RDW is normally low (normal range 12-15%), but higher values may be indicative of significant heterogeneity in RBC size, a condition sometimes referred to as anisocytosis.
- An elevated RDW is the first hematological manifestation of iron deficiency anemia, and hence a very sensitive screening test for that particular disorder.

# - Focus on Elements -

## RDW

**Clinical range** 11.5 - 14.5

RDW is an electronic measurement of Anisocytosis (red cell size variability).

### **INCREASED IN:**

- Iron deficiency anemia
- Beta Thalassemia minor
- Pernicious anemia
- B12 and folate deficiency

### **Nutrients to consider:**

- B12, Folic acid and iron

# ADDITIONAL TESTING IF ANEMIA IS PRESENT

- B12
- Folic Acid (B9)
- B6

# FOLATE/FOLIC ACID

- Folate/Folic Acid (also known as B-9) is a B vitamin that helps the body make and maintain various cells.
- It helps make DNA, RNA, amino acids and red blood cells and is very important in pregnancy to prevent birth defects.
- Digestive disease including Crohn's and celiac disease will cause poor absorption of folic acid, as will several drugs and eating excessively cook food.
- Insufficient folic acid will lead to low platelet count, low white and red blood cell counts and elevated homocysteine. High homocysteine significantly increases the risk for coronary heart disease and stroke. Low levels of folic acid have been associated with risks for breast and colorectal cancer, depression and folic acid might help to prevent cancer or cancer mutations.
- Folic acid is found in the serum and in red blood cells. The vast majority of folic acid is in red blood cells and is a better method to determine tissue levels in the body. The test to determine the folate of red blood cells is called hemolysated folate. Serum folic acid levels will fluctuate more readily depending on intake of foods, supplements and digestion.

# FOLIC ACID AND METHYLFOLATE AND MTHFR

- **Folic Acid:** If anemia presents with elevated levels of serum folic acid and/or homocysteine then further testing is indicated and **Methylfolate** will likely be required.
- MTHFR stands for methylenetetrahydrofolate reductase – an enzyme that activates folic acid by adding a methyl group to it.
- Activated folate (named 5MTHF) goes on to give its methyl group to other nutrients and substances – a process called “methylation.” It is required for the creation of every cell in your body.
- 5MTHF, along with several other nutrients, is also used to create and process neurotransmitters (messengers in the nervous system like serotonin, epinephrine, norepinephrine, and dopamine); create immune cells and process hormones (such as estrogen); as well as to produce energy and detoxify chemicals.
- Deficiencies in production or function of this enzyme have also been associated with increased risk of myocardial infarction, stroke, venous thrombosis, several types of cancer, congenital defects, inflammatory bowel disease, and several neuropsychiatric conditions. Other significant roles of a properly functioning MTHFR enzyme include nucleic acid biosynthesis, neurotransmitter synthesis, and production of signaling molecules important for **regulating embryonic development**.



# PRIMARY CAUSES OF ANEMIA \*\*\*\*\*

- Heavy Menstrual periods
- Lack of good quality protein
- Poor digestion
- Lack of B12, Folic Acid, B6, Iron
- Poor liver and pancreas function
- Intestinal diseases including ulcers, crohn's, IBS and cancer
- Kidney disease- including cancer and polycystic kidney disease
- Urinary tract disease including Chronic UTI, bladder cancer
- Medications
- Pesticides, herbicides, cleaning chemicals and industrial chemicals
- Heavy metals- especially lead, mercury, aluminum, arsenic
- Chemo therapy
- Radiation exposure

# ANEMIA'S

CONTRIBUTE/CAUSE HEART DISEASE INCLUDING HBP AND TACHYCARDIA

- One of the major effects is **greatly increased work load on the heart**
- Low viscosity (due to low concentration of RBC) causes greater quantity of blood return to the heart
- Hypoxia causes vessels dilation further increasing quantity of blood returning to the heart
- Both cause increasing cardiac output to such an extent that almost normal quantities of oxygen is delivered to the tissues.

# PERNICIOUS ANEMIA- A DEFICIENCY OF B12.

- Pernicious anemia is a disease where not enough red blood cells are produced due to a deficiency of vitamin B<sub>12</sub>
- Feeling tired, shortness of breath, pale skin, numbness in the hands and feet, confusion, poor reflexes, diarrhea or constipation, loss of appetite, **shortness of breath, lightheadedness** when standing or with exertion
- Digestive system problems that cause nausea, bloating and weight loss.
- **Nervous system damage that causes muscle weakness, numbness or tingling in your hands and feet, memory loss and dementia.**
- **Heart problems that can cause palpitations (feeling as your heart is beating too fast or skipping beats).**
- **Weakness, fatigue, depression, irritability, delusions, memory loss, loss of balance, hallucinations**
- **Optic nerve degeneration affecting eyesight**
- **Swollen, red tongue or bleeding gums.**

# ANEMIAS

- Blood Loss Anemia: Can't absorb iron as fast as hemoglobin is lost. Aplastic Anemia: Bone Marrow depression (Aplasia) due to radiation, chemo, drugs, environmental toxins
- **Maturation Failure Anemia (Pernicious anemia):** Most common due to deficiency of B12 and folic acid. Can also be due to intestinal sprue or decreased intrinsic factor from the stomach mucosa due to atrophy or loss of part or all of stomach ( think drugs that directly affect the stomach Aspirin, antacids, Prilosec, Prevacid) this may result in macrocytosis , bizarre shapes and easily ruptured
- **Hemolytic Anemia:** abnormalities of RBC's, number of RBC's may be normal, cells are fragile and rupture easily even going through the spleen. The spleen is sometimes removed for this.

# ANEMIA'S

- **Hereditary spherocytosis:** spherical rather than biconcave RBC
- **Sickle cell anemia:** abnormal composition of hemoglobin. When the hemoglobin is exposed to low concentrations of O<sub>2</sub> it precipitates into long crystals inside the red blood cell. These crystals elongate the cell and give it a sickle appearance. The crystals damages the cell membrane which is highly fragile, leading to serious anemia. The sickling causes impediment of blood flow causing still further decrease in oxygen tensions. Once this process starts, it can progress rapidly, leading to serious decrease in red blood cell mass within a few hours and, often, to death.
- **Thalassemia:** small cells and have fragile membranes, that are easily ruptured
- **Polycythemia:** too many Blood cells RBC's, WBC's and Platelets



# ANEMIA'S

Decreased tissue oxygenation is the basic stimulus of RBC production

- Cardiac failure
- Lung disease
- Smoking
- Renal cyst
- Renal carcinoma
- Collagen disease
- Vascular disease
- Postoperative
- Postpartum
- High altitudes
- Exercise
- Polycythemia vera  
(tumorous condition of marrow)

# ANEMIA'S

- Polycythemia vera is a tumorous condition of the marrow or organs that produce blood cells
- Polycythemia results in increased viscosity and sluggish blood flow and decreased rate of venous return to the heart. Due to increased blood volume the cardiac output is not far from normal because these two factors neutralize each other.
- Hypoxia seen with polycythemia and reduced blood flow can give a bluish (cyanotic) tint to the skin.

# - Focus on Elements -

## Serum Iron

**Clinical range** 50-160mcg/dL

**Healthy range** 85-125mcg/dL

The ESR is usually normal in iron deficiency anemia.

The ESR is usually elevated in acute or chronic disease combined with iron deficiency anemia.

### **INCREASED in:**

- Hemochromatosis: check ferritin levels
- Iron poisoning: may cause black stools.
- Dialysis
- Hepatitis

### **Drugs:**

- Dextran
- Birth control pills
- Estrogen
- Progestin
- Chloramphenicol

**Nutrients to consider:** Based on other values and CBC.

### **DECREASED in:**

- Serum iron levels below 85mcg/dL: do a stool analysis and urinalysis.
- Iron deficiency; Glycohemoglobin A1-C increase
- Hypothyroidism
- Anemia: the platelet count may be increased.
- Blood loss; Poor iron absorption
- Gastritis; Protein deficiency; Chronic infection, Inflammation
- Cancer
- Kidney disease; Malnutrition; Celiac sprue
- Chronic disease
- Increased serum copper (Wilson's disease)
- Childhood anemias that may require iron and copper
- Failure to thrive in infants
- Pregnancy and lactation

**Drugs:** ACTH

**Nutrients to consider:** iron, B12 & folic acid





I HAVE THE  
**BODY**

— OF A —

**G D**



UNFORTUNATELY  
**IT'S BUDDHA**

# SCIENCE BASED NUTRITION VITAMIN GUIDELINES AND WEIGHT CONSIDERATIONS

- A vitamin/nutrient listed does not mean it is recommended for any condition including pregnancy.
- Any vitamin/nutrient may cause a reaction or sensitivity of some kind in any individual.
- Any dosage recommendation is a general recommendation and is not to be considered an absolute. Many factors may dictate a need to modify the guidelines.
- Different vitamin companies may have higher or lower levels and combinations of nutrients that make it difficult getting the 'exact' dosage to match the levels listed here. More severe conditions may require higher levels than are recommended here.



# SCIENCE BASED NUTRITION

## VITAMIN GUIDELINES AND WEIGHT CONSIDERATIONS

Nutrient	Tablet dosage	Daily dose: 50-110lbs 110-190lb over 190lbs		
• Acidophilus	1 billion	2 caps	3 caps	3 caps
• Adrenal Glandular	80mg	80	160	240
• Anterior Pituitary	35mg	35	70	105
• Arginine (L)	500mg	500	1,000	1,500
• Ascorbic Acid	1tsp=4gms:	based on condition		
• Vit C	1,000mgs	2,000	3,000	4,000
• B-Complex	50mg	50	100	150
• B-12/Folic acid	1,000mcg/400mcg	2,000	3,000	4,000
• B-6		50mg	200mg	500mg
• Betaine HCL	325 mg	based on condition		
• Beta-Carotene	25,000IU	25K	50K	75K
• Bromelain	500mg	1,000	2,000	3,000
• Calcium MCHC	250mg	500	750	1,000
• Carnitine (L)	300mg	300	600	900
• Chlorella/Spirulina	250mg/250mg	500	750	1,000
• Choline	640mg	640	1280	1920
• Chromium Picolinate	250mg	250	500	750
• CoQ10	50mg	150	200	250
• Vit D	5,000IU	2,500	5000	5000
• EPA/DHA	180mg/120mg	180	360	540
• Vit E + Selenium	400IU, 50mcg	400	800	1200
• Folic Acid	800mcg	800	1600	2400
• GLA (Borage oil)	240mg	240	240	240
• Garlic	500mg	500	1000	1500
• Germanium	150mcg	50	100	150

# SCIENCE BASED NUTRITION

## VITAMIN GUIDELINES AND WEIGHT CONSIDERATIONS, CONTINUED

Nutrient	Tablet dosage	Daily dose: 50-110lbs, 110-190lb, over 190lbs		
• Glucosamine	500mg	500	1000	1500
• Glutamine	500mg	1000	1500	2000
• Inositol	320mg	320	640	960
• Iron	Based on condition			
• Lauricidin	1/4tsp	1tsp	1.5tsp	2tsp
• Lithium	50mcg	10mcg	25mcg	50mcg
• Liver glandular	500mg	1000	2000	3000
• Manganese	50mg	25	50	100
• Magnesium Glycinate	100mg	200	300	400
• Magnesium/Malic Acid	100mg/400mg	200	300	400
• Methionine (L)	500mg	500	1000	1500
• Minerals (Spectramin Chelate)		1	2	3
• Niacin	250mg	250	500	750
• Niacinamide	500mg	500	1000	1500
• Norwegian Sea Kelp	.15mg iodine	.45	.75	.90
• Pancreatic Enzymes: combination of: Lipase 10K, Amylase 50K, Protease 50K		1	2	3
• Pantothenic Acid	250mg	500	1000	1500
• Potassium	99mg	50	99	150
• Selenium	200mcg	100	200	300
• Silymarin, Milk Thistle	150mg	150	300	450
• Thymus	140mg	140	280	320
• Turmeric	450mg	900	1800	2700
• Tyrosine (L)	500mg	1000	1500	2000
• Vanadium	250mcg	100	250	500
• Zinc	50mg	25	50	75



# Anemia Worksheet

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7
<b>Serum Iron</b>	low, Dx 1						
<b>Ferritin</b>							
<b>WBC</b>							
<b>RBC</b>	low, Dx 1						
<b>Hgb</b>	low, Dx 1						
<b>Hct</b>	low, Dx 1						

	Condition	Consideration
Case 1		
Case 2		
Case 3		
Case 4		

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7
Serum Iron	low, Dx 1						
Ferritin							
WBC							
RBC	low, Dx 1						
Hgb	low, Dx 1						
Hct	low, Dx 1						

	Condition	Consideration
Case 1	<b>Dx 1:</b> Iron Deficiency Anemia, Blood Loss <b>Nutrients for DX 1:</b> Iron, B12/Folic Acid	UA, Stool, Kidney What dosage of Nutrients?
Case 2		
Case 3		
Case 4		

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7
Serum Iron	low, Dx 1	LOW, Dx 1					
Ferritin							
WBC		HIGH, Dx 2					
RBC	low, Dx 1	LOW, Dx1					
Hgb	low, Dx 1	low, Dx 1					
Hct	low, Dx 1	low, Dx 1					

	Condition	Consideration
Case 1	<b>Dx 1:</b> Iron Deficiency Anemia, Blood Loss <b>Nutrients for DX 1:</b> Iron, B12/Folic Acid	UA, Stool, Kidney
Case 2		
Case 3		
Case 4		

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7
Serum Iron	low, Dx 1	LOW, Dx 1	low, Dx 1				
Ferritin			HIGH, Dx 1 & Dx 2				
WBC		HIGH, Dx 2	HIGH, Dx 2				
RBC	low, Dx 1	LOW, Dx1	LOW, Dx 1				
Hgb	low, Dx 1	low, Dx 1	low, Dx 1				
Hct	low, Dx 1	low, Dx 1	low, Dx 1				

	Condition	Consideration
Case 1	<b>Dx 1:</b> Iron Deficiency Anemia, Blood Loss <b>Nutrients for DX 1:</b> Iron, B12/Folic Acid	UA, Stool, Kidney
Case 2	<b>Dx 1:</b> Iron Deficiency Anemia, Blood Loss <b>Nutrients for DX 1:</b> Iron, B12/Folic Acid <b>Dx 2:</b> Possible Infection <b>Nutrients for DX 2:</b> Lauricidin, Vit C, Echinacea, Acidophilus	UA, Stool, ESR, Kidney
Case 3	<b>Dx 1:</b> Iron Deficiency Anemia <b>Nutrients for Dx 1:</b> Iron, B12/Folic Acid <b>Dx 2:</b> Possible Infection/Inflammation <b>Nutrients for Dx 2:</b> Lauricidin, Vit C, Echinacea, Acidophilus, Inflammation	<b>Consideration for Dx 1:</b> Liver, Metals, Kidney, Stool, UA <b>Consideration for Dx 2:</b> ESR



	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7
<b>Serum Iron</b>	low, Dx 1	LOW, Dx 1	low, Dx 1	LOW, Dx 1	VLOW, Dx 1	VLOW, Dx 1	LOW, Dx 1
<b>Ferritin</b>			HIGH, Dx 1 & Dx 2	low, Dx 1	LOW, Dx1	HIGH, Dx 2	LOW, Dx 1
<b>WBC</b>		HIGH, Dx 2	HIGH, Dx 2		LOW, Dx 1		VLOW, Dx 1
<b>RBC</b>	low, Dx 1	LOW, Dx1	LOW, Dx 1	LOW, Dx 1	VLOW, Dx 1	VLOW, Dx 1	VLOW, Dx 1
<b>Hgb</b>	low, Dx 1	low, Dx 1	low, Dx 1	LOW, Dx 1	VLOW, Dx 1	HIGH, Dx 2	VLOW, Dx 1
<b>Hct</b>	low, Dx 1	low, Dx 1	low, Dx 1	LOW, Dx 1	VLOW, Dx 1	HIGH, Dx 2	VLOW, Dx 1

<b>Case 4</b>	<b>Dx 1:</b> Severe Anemia, Blood Loss <b>Nutrients for Dx 1:</b> B12/Folic Acid, Iron, Carnatine, Chelated Minerals	Check Metals, Liver, Kidney, Stool, UA
<b>Case 5</b>	<b>Dx 1:</b> Severe Anemia, Blood Loss, Check Metals and Liver, Bone Marrow Depression <b>Nutrients for Dx 1:</b> Iron, B12/Folic Acid, Trace Minerals	Dosages?
<b>Case 6</b>	<b>Dx 1:</b> Severe Anemia <b>Dx 2:</b> Hemochromatosis	
<b>Case 7</b>	<b>Dx 1:</b> Severe Anemia, Check Liver, Metals, Suspect Cancer/ Cancer Tx, Blood Loss <b>Nutrients for Dx 1:</b> B12/Folic Acid, Iron, Trace Minerals	Drugs, Cancer, UA, Stool

# New Patient Questionnaire: Part 1

BACK TO HEALTH CENTER  
Van D. Merkle, D.C., D.A.C.B.N., D.A.C.B.I., C.C.N.  
Nutrition Patient Questionnaire

Patient# \_\_\_\_\_ Date \_\_\_\_\_  
Classification \_\_\_\_\_ SS# \_\_\_\_\_  
Name \_\_\_\_\_ Date of Birth \_\_\_\_\_  
Address \_\_\_\_\_ City/State \_\_\_\_\_  
Email \_\_\_\_\_ Zip Code \_\_\_\_\_  
Telephone: Home \_\_\_\_\_ Work \_\_\_\_\_  
Place of Employment \_\_\_\_\_ Occupation \_\_\_\_\_  
Married \_\_\_\_\_ Single \_\_\_\_\_ Divorced \_\_\_\_\_ Widow(er) \_\_\_\_\_ # of Children \_\_\_\_\_  
Spouse's Name \_\_\_\_\_ Place of Employment \_\_\_\_\_  
In Case of Emergency, who should we contact?  
Name \_\_\_\_\_ Phone \_\_\_\_\_ Relationship \_\_\_\_\_  
How did you hear about our office? \_\_\_\_\_

We will provide a receipt for you to submit to your insurance. You are responsible for payment in full at the time of service.

\*\* I clearly understand that all services rendered me are my responsibility and payment is expected at the time of service.

Patient's Signature \_\_\_\_\_ Date \_\_\_\_\_  
If under 18 years of age, parent or guardian's signature \_\_\_\_\_

## Nutritional Informed Consent

According to the Federal Food, Drug, and Cosmetic Act, as amended, Section 201 (g) (1), the term "DRUG" is defined to mean: *"Articles intended for use in the Diagnosis, Cure, Mitigation, Treatment or Prevention of disease."*

A vitamin is not a drug, NEITHER is a Mineral, Trace Element, Amino Acid, Herb, or Homeopathic Remedy.

Although a Vitamin, a Mineral, Trace Element, Amino Acid, Herb or Homeopathic Remedy may have an effect on any disease process or symptoms, this does not mean that it can be misrepresented, or be classified as a drug by anyone.

Therefore, please be advised that 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 processes of the human body. Nutritional advice and nutritional intake may also enhance the stabilization of chiropractic adjustments and treatment.

I have read and understand the above:

Signature \_\_\_\_\_

Date \_\_\_\_\_

# PART 2: INFORMED CONSENT

## Nutritional Informed Consent

According to the Federal Food, Drug, and Cosmetic Act, as amended, Section 201 (g) (1), the term “DRUG” is defined to mean: *“Articles intended for use in the Diagnosis, Cure, Mitigation, Treatment or Prevention of disease.”*

A vitamin is not a drug, NEITHER is a Mineral, Trace Element, Amino Acid, Herb, or Homeopathic Remedy.

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I have read and understand the above:

Signature \_\_\_\_\_ Date \_\_\_\_\_



## Complete copy of PSS available at [www.Take2Healthcare.com](http://www.Take2Healthcare.com)

- This is just the first page of the Patient Symptom Survey
- Complete copy of PSS available at [www.Take2Healthcare.com](http://www.Take2Healthcare.com)



# PATIENT SYMPTOM SURVEY

DATE\_\_\_\_\_

PATIENT'S NAME\_\_\_\_\_AGE\_\_\_\_\_

WEIGHT\_\_\_\_\_HEIGHT\_\_\_\_\_BLOOD PRESSURE\_\_\_\_\_PULSE\_\_\_\_\_

*This is a confidential patient symptom survey. Please check each condition which is true for you. If the condition does not apply to you or you do not understand a term or if you are not sure if a condition applies to you, then do not check the box. Use common sense. For example, Insomnia once in the last month probably isn't that important and would not be marked. However, Insomnia occurring 1-2 times per week is notable and would be marked. Please take your time...*

Complete copy of PSS available at [www.Take2Healthcare.com](http://www.Take2Healthcare.com)



## PSS: PRIMARY COMPLAINTS

090 <input type="checkbox"/> General Good Health	039 <input type="checkbox"/> High Blood Pressure I10	063 <input type="checkbox"/> Prostate Disorder N42.9
091 <input type="checkbox"/> Desires Nutritional & Metabolic Analysis	040 <input type="checkbox"/> Low Blood Pressure I95.9	069 <input type="checkbox"/> Hyperthyroidism E05.90
001 <input type="checkbox"/> Skin Disorder L25.9	041 <input type="checkbox"/> Tachycardia (High Heart Rate) R00.0	070 <input type="checkbox"/> Hypothyroidism E03.9
002 <input type="checkbox"/> Acne L70.8	042 <input type="checkbox"/> Numbness R20.9	071 <input type="checkbox"/> Systemic Lupus M32.10
003 <input type="checkbox"/> Psoriasis L40.8	043 <input type="checkbox"/> Constipation K59.00	072 <input type="checkbox"/> Infertility, female N97.9
004 <input type="checkbox"/> Urticaria (Hives) L50.9	<b>#1</b> 044 <input type="checkbox"/> Indigestion K30	073 <input type="checkbox"/> Interstitial Cystitis N30.11
005 <input type="checkbox"/> ADD/ADHD F90.1/F90.9	045 <input type="checkbox"/> Ulcerative Colitis K51.90	074 <input type="checkbox"/> Irregular Menstrual Cycle N92.6
006 <input type="checkbox"/> Allergies, Unspecified J30.9	046 <input type="checkbox"/> Depression F32.9	075 <input type="checkbox"/> Menopausal Symptoms N95.1
007 <input type="checkbox"/> Allergic Rhinitis from food J30.5	047 <input type="checkbox"/> Diabetes Mellitus E11.9	076 <input type="checkbox"/> Hot Flashes N95.1 <b>#3</b>
008 <input type="checkbox"/> Sinusitis J01.90	030 <input type="checkbox"/> Diabetes Type I E10.9	077 <input type="checkbox"/> Mental Disorder F99
009 <input type="checkbox"/> Alzheimer's G30.9	031 <input type="checkbox"/> Diabetes Type II E11.65	078 <input type="checkbox"/> Insomnia G47.00
010 <input type="checkbox"/> Poor Concentration/Memory F07.8	029 <input type="checkbox"/> Hyperglycemia [high blood sugar] R73.09	079 <input type="checkbox"/> Mouth/Throat/Tongue
011 <input type="checkbox"/> Parkinson's Disease G20	048 <input type="checkbox"/> Hypoglycemia [low blood sugar] E16.2	080 <input type="checkbox"/> Canker Sores K12.0
012 <input type="checkbox"/> Anemia D64.9	049 <input type="checkbox"/> Dizziness/Balance Problem R42	081 <input type="checkbox"/> Overweight E66.3 <b>#2</b>
013 <input type="checkbox"/> Arthritic Disorder M12.9	050 <input type="checkbox"/> Ear Infection H65.90	082 <input type="checkbox"/> Underweight R63.6
014 <input type="checkbox"/> Osteoporosis M81.0 <b>#4</b>	051 <input type="checkbox"/> Epstein Barr B27.90	083 <input type="checkbox"/> Sexual Disorder F66
015 <input type="checkbox"/> Asthma J45.909	052 <input type="checkbox"/> Eye Problems H57.13	084 <input type="checkbox"/> Spinal Problems M53.9
016 <input type="checkbox"/> Emphysema J43.9	053 <input type="checkbox"/> Cataracts H26.9	085 <input type="checkbox"/> Obesity E66.9
017 <input type="checkbox"/> Cancer		086 <input type="checkbox"/> GERD K21.9
018 <input type="checkbox"/> Breast C50.919female C50.929male		087 <input type="checkbox"/> HIV B20
019 <input type="checkbox"/> Prostate C61		088 <input type="checkbox"/> Crohn's Disease K50.90
		089 <input type="checkbox"/> Irritable Bowel Syndrome K58.9

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## PSS: GENERAL HEALTH

- 100 ☐ Fingernail base is pink
- 101 ☐ Fingernail base is purple
- 102 ☐ Fingernails have ridges or white spots
- 103 ☐ Fingernails are soft
- 104 ☐ Fingernails are splitting
- 105 ☐ Fingernails peel
- 106 ☐ Pale fingernail beds
- 107 ☐ Blacks out easily
- 108 ☐ Balance problems
- 109 ☐ Difficulty walking
- 110 ☐ Has tattoos
- 111 ☐ Brittle hair
- 112 ☐ Dry hair
- 113 ☐ Thin hair
- 114 ☐ Hair loss
- 115 ☐ Drinks alcoholic beverages daily
- 116 ☐ Drinks less than 8 glasses of water per day
- 117 ☐ Currently on Chemotherapy
- 118 ☐ Currently on radiation treatment
- 119 ☐ Had chemotherapy in the past
- 120 ☐ Has had radiation treatments in the past

- 121 ☐ Gained over 20 lbs in the last 12 months
- 122 ☐ Somewhat Overweight
- 123 ☐ Somewhat Underweight
- 124 ☐ Unexplained loss of >20lbs in last 4 months
- 125 ☐ Energy level is worse than it was 5 years ago
- 127 ☐ Sleeps less than 6 hours per night
- 128 ☐ Unable to recall dreams the next day
- 129 ☐ Sensitive to chemicals, paint, fumes, cologne
- 130 ☐ Had blood transfusion in the past
- 131 ☐ Had transplant in the past
- 138 ☐ Takes anti-rejection drugs
- 132 ☐ Had a major accident or injury
- 137 ☐ Sleep Apnea
- 139 ☐ Toxic chemical exposure
- 175 ☐ Has been out of the country recently
- 176 ☐ Had childhood vaccines
- 177 ☐ Had a vaccine in the last 12 months

- 147 ☐ Had a flu shot last year
- 182 ☐ Had a pneumonia vaccine last year
- 183 ☐ Had a Hepatitis B vaccine in the last 2 years

Has a family history of:

- 184 ☐ Cancer
- 185 ☐ Heart Disease
- 186 ☐ Diabetes
- 187 ☐ Alcoholism
- 188 ☐ Depression
- 189 ☐ Obesity

Allergies:

- 206 ☐ Dairy
- 207 ☐ Eggs
- 208 ☐ Garlic
- 209 ☐ Gluten
- 210 ☐ Mold
- 211 ☐ Peanut
- 212 ☐ Ragweed
- 213 ☐ Shellfish
- 214 ☐ Soy
- 215 ☐ Sulfa drugs
- 216 ☐ Tree nuts
- 217 ☐ Wheat
- 218 ☐ Other allergies

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## PSS: LIFESTYLE HABITS

- 380 ☐ Drinks beverages from a can
- 370 ☐ Drinks alcohol
- 371 ☐ Drinks caffeinated coffee
- 372 ☐ Drinks caffeinated pop/soda
- 373 ☐ Drinks caffeinated tea
- 374 ☐ Drinks decaffeinated coffee
- 375 ☐ Drinks decaffeinated pop/soda
- 376 ☐ Drinks decaffeinated tea
- 377 ☐ Drinks >3 cups of coffee daily
- 378 ☐ Drinks >3 cups of tea per day
- 388 ☐ Drinks diet pop/soda
- 379 ☐ Drinks >1 pop/sodas per day
- I had 4 alcoholic drinks in one day:
  - 172 ☐ never
  - 173 ☐ more than 3 months ago
  - 174 ☐ less than 3 months ago
- 381 ☐ Has >5 alcoholic drinks/week
- 391 ☐ Craves sugar / starches

- 382 ☐ Currently smokes
- 383 ☐ Quit smoking in last 5 years
- 384 ☐ Smoked for >5 years
- 385 ☐ Smokes >1 pack per day
- 126 ☐ Rarely exercises
- 133 ☐ Regularly exercises
- 386 ☐ Takes Vitamins
- 134 ☐ Vegetarian
- 135 ☐ Eats no red meat
- 136 ☐ Eats no meat, no dairy
- 387 ☐ Frequent use of artificial sweeteners
- 389 ☐ Anorexia
- 390 ☐ Bulimic
- 340 ☐ Home has well water
- 341 ☐ Home has city water
- 342 ☐ Home water is filtered

Home pipes are:

- 343 ☐ Steel
- 344 ☐ PVC
- 345 ☐ Copper
- 346 ☐ PEX
- 347 ☐ Home built prior to 1978
- 348 ☐ Home renovations within the last year
- 349 ☐ Uses chlorine bleach or other heavy duty chemicals
- 360 ☐ Has worked in plumbing, automotive or metallurgic industry
- 361 ☐ Has worked around industrial solvents, chemicals or pesticides



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## PSS: GASTROINTESTINAL

- |   |   |
|---|---|
| 265 <input type="checkbox"/> 4-5 bowel movements per week       | 284 <input type="checkbox"/> Immediate indigestion upon eating          |
| 266 <input type="checkbox"/> 3 or less bowel movements per week | 285 <input type="checkbox"/> Indigestion in 2 hours or more after meals |
| 267 <input type="checkbox"/> 6 or more bowel movements per week | 286 <input type="checkbox"/> Indigestion within 1 hour after meals      |
| 268 <input type="checkbox"/> Black tarry stools                 | 287 <input type="checkbox"/> Difficulty swallowing                      |
| 269 <input type="checkbox"/> Pale or yellow colored stool       | 288 <input type="checkbox"/> Eating relieves fatigue                    |
| 270 <input type="checkbox"/> Blood stools                       | 289 <input type="checkbox"/> Eats when nervous                          |
| 271 <input type="checkbox"/> Constipation                       | 290 <input type="checkbox"/> Excessive hunger                           |
| 272 <input type="checkbox"/> Hemorrhoids                        | 291 <input type="checkbox"/> Poor appetite                              |
| 273 <input type="checkbox"/> Loose bowel movements              | 292 <input type="checkbox"/> Experiences fainting spells when hungry    |
| 274 <input type="checkbox"/> Frequent diarrhea                  | 293 <input type="checkbox"/> Feels shaky when hungry                    |
| 275 <input type="checkbox"/> Frequent nausea                    | 294 <input type="checkbox"/> Frequently drowsy after eating a meal      |
| 276 <input type="checkbox"/> Frequent vomiting                  | 295 <input type="checkbox"/> Gall bladder disease                       |
| 277 <input type="checkbox"/> Abdominal gas                      | 296 <input type="checkbox"/> Has had intestinal worms                   |
| 278 <input type="checkbox"/> Belching and burping after eating  | 297 <input type="checkbox"/> Reflux/Hiatal hernia                       |
| 279 <input type="checkbox"/> Bloating after eating              | 298 <input type="checkbox"/> Liver disease                              |
| 280 <input type="checkbox"/> Severe abdominal pains             | 299 <input type="checkbox"/> Irritable Bowel Syndrome                   |
| 281 <input type="checkbox"/> Stomach ulcers                     | 300 <input type="checkbox"/> Diverticulitis                             |
| 282 <input type="checkbox"/> Uses digestive aids                | 301 <input type="checkbox"/> Diverticulosis                             |
| 283 <input type="checkbox"/> Uses laxatives                     |   |

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## PSS: MEDICATIONS

### Medications

Please list all drugs you are currently taking on a daily basis.

<u>DRUG</u>	<u>PRESCRIBED FOR:</u>	<u>HOW LONG</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please list all drugs taken within the last year and/or you take as needed including over the counter drugs, antibiotics, aspirin, inhalers, etc.

<u>DRUG</u>	<u>PRESCRIBED FOR:</u>	<u>HOW LONG</u>
_____	_____	_____
_____	_____	_____

### Supplements

Please list all vitamins/herbs/supplements you are currently taking and dosages.

<u>VITAMIN</u>	<u>BRAND</u>	<u>DOSAGE</u>
_____	_____	_____
_____	_____	_____

# THE PURPOSE OF THE CONSULTATION

- Primarily to develop confidence in the doctor by:
  - taking a good history
  - really listening to the patient
  - providing hope
  - laying out a plan of action
    - testing
    - report of findings
    - expected results based on previous history, experience and study

THE PURPOSE OF THE  
CONSULTATION

**THIS IS WRONG! THIS IS  
NOT THE MAIN THING IN  
THE CONSULTATION.  
THE MAIN THING IS TO  
GET THE PATIENT TO DO  
ALL OF THE TESTING!!!**

is based on previous history, experience and study

# TESTING DRIVES EVERYTHING, THE REPORT IS THE MAP ON THE QUEST FOR BETTER HEALTH

- Doctor's confidence
- Patient confidence
- Reporting and consultations
- Compliance
- Further testing
- Retesting
- Results which lead to:
- Referrals

# Focus on Elements: White Blood Count

55

**Clinical range** 4.0 -10.5u/L

**Healthy range** 5.5 - 8.0u/L.

**Possible panic range:** less than 2.5u/L and over 30u/L.

**CRITICAL RANGE:** less than 1.5u/L.

**Use:** bacterial and viral infections, toxic metabolic processes and diagnose/evaluate leukemic states.

## **DECREASED in:**

- **Chronic infection**
- Bone marrow depression
- Collagen-vascular disease
- Lupus erythematosus
- Auto-immune diseases
- Viral hepatitis
- Hypersplenism

## **Drugs:**

- Bezafibrate: an antihyperlipidemic fibric acid

## **Nutrients to consider:**

- B12, folic acid

## **INCREASED in:**

- **Acute infection**
- Pregnancy                      Allergic purpura
- Appendicitis (12-14u/L)
- Diverticulitis                      Ascites
- Infections                      Cancer
- Acute cholecystitis
- Diabetic ketoacidosis
- Fatty liver                      Hemolytic anemia
- Alcoholic hepatitis
- Hyposplenism                      Decreased ESR
- Kidney disease
  - Spider bites
  - Snake bites
  - Leukemia

## **Nutrients to Consider:**

- Lauricidin, Vit C, Echinacea, Acidophilus, Oregano oil, etc.



# WHITE BLOOD CELLS

- Lymphocytes have a life span of 100 to 300 days... maybe even years.
- Circulate in the blood, pass into the tissues by diapedesis (similar to amoeba), reenter the lymph and return to the blood again and again.
- Multipotential cells similar to stem cells which can become, under appropriate conditions, erythroblasts (RBC's), myeloblasts (leukocytes), fibroblasts (connective tissue) etc.
- There is actually a blood test called the Lymphocyte Transformation Test that will detect and classify congenital or acquired immunodeficiency disorders and hypersensitivity Type 1 reactions.

# WHITE BLOOD CELLS

- Lymphocytes and immunity: B + T cells
- Thymus “T” Cells are responsible for immunity at the cellular level, for rejection of transplanted organs, and useful to monitor and diagnose AIDS specifically T4 (helper cells) & T8 (suppressor cells).



# WHITE BLOOD CELLS

- “B” Lymphocytes migrate to the thymus, where they develop into T cells and begin to mature.
- From the thymus they go to a particular area of the peripheral lymphoid tissues and from there they circulate between blood and lymph.
- “B” Lymphocytes are responsible for antibody production.
- They become activated to a specific antigen. It produces antibody and “clones” of itself to produce more antibody. The more the antigen is introduced the more clones are made to produce specific antibodies.
- These are “dedicated” Lymphocytes to a specific antigen and only respond to it. This response may last several weeks or several months. This is the rational and philosophy of vaccination.

# - Focus on Elements -

## Platelets: 140-415 k/cumm clinical 175-250 k/cumm subclinical

**Clinical range** 150-450k/cumm

**Healthy range** 175-250k/cumm.

**Panic Range:** <50,000/cumm or >1,000,000/cumm.

**CRITICAL RANGE:** less than 30k/cu mm and over 1000k/cu mm.

### **DECREASED in: (called thrombocytopenia)**

- Hypersplenism
- Vaccinations
- Thrombocytopenic purpura
- Aplastic anemia
- Folate and B12 deficiency
- SLE (Lupus)
- Kidney disease
- Septicemia
- Toxemia of pregnancy
- Leukemia
- Liver Cirrhosis
- Bleeding
- Transfusions
- Infections
- Bone marrow suppression

### **Drugs:**

- Acetaminophen
- Penicillin
- Alcohol
- Adriamycin- doxorubicin hydrochloride
- Antipurines
- Bleomycin
- Alkylating agents
- Antipyrimidines
- D-Asparaginase
- Antibiotics ie: chloramphenicol, streptomycin

### **DECREASED in continued:**

- Antibacterial agents ie: Isoniazid (INH), sulfonamides
- Anticonvulsant drugs ie: ethosuximide (zarontin), methylhydantoin, paramethadione, phenacemide, trimethadione;
- Antirheumatic drugs ie: colchicines, gold salts, Indomethacin
- Phenylbutazone
- Hypoglycemic agents ie: carbutamide, Chlorpropamide, tolbutamide;
- Tranquilizers ie: chlordiazepoxide, chlorpromazine, meprobamate, promazine.
- Acetazolamide
- EDTA
- Chlorthiazide
- Heparin
- Hydralazine
- Quinacrine
- Tripelennamine
- Quinidine
- Quinine
- Sulfas
- Rifampicin
- ASA
- Digitoxin

### **Environmental toxins:**

- DDT; Benzol; Diphenylhydantoin; PAS; Hydrochlorothiazide; Phenylbutazone

### **Nutrients to consider:**

- Folic acid, B 12, Vit T (sesame seed oil)

### **INCREASED in:**

- Myeloproliferative disorder
- Hyposplenism
- Polycythemia Vera
- Leukemia
- Infections
- Chronic inflammation
- Inflammatory bowel disease
- Collagen diseases
- Iron deficiency anemia
- Cardiac disease
- Cirrhosis of liver
- Pancreatitis
- Postpartum
- Exercise

### **Drugs:**

- Oral contraceptives

### **Nutrients to consider:**

- Vit E
- GLA
- Bromelain



# FOCUS ON ELEMENTS - MPV

- MPV Ranges: Clinical 7.4 to 11 fL; Healthy 8.6-9.8; Critical 5-13
- MPV – the mean platelet volume (MPV) is similar to the MCV; it represents the average size of the platelets within a blood sample. This is a relatively new test and not included in by all laboratories. Measured in cubic micrometers or femtoliters, normal values are generally between 7 and 11 fL.
- A reduced MPV is indicative of small platelets, and may be consistent with disorders such as aplastic anemia. An elevated MPV is encountered when platelets are larger than average, such as in Idiopathic Thrombocytopenic Purpura.
- Recently, researchers have found that altered MPV levels may be consistent with increased risk of certain systemic diseases. Specifically, a low MPV has been shown to be an important marker for inflammatory bowel disease such as ulcerative colitis or Crohn's disease.<sup>1</sup> In contradistinction, scientists have found markedly elevated MPV levels in patients at risk for stroke and heart attack.

# Neutrophils (Polys, SEGS, PMNS)

**Clinical range** 50-70%

**Healthy range** 55-65%.

**Absolute neutrophil count:** clinical range over 1800/cu mm and less than 8000/cu mm

-live about 7 hours, are expendable and form pus.

Note: bacterial and viral infections, cancer and many other conditions will most commonly elevate neutrophils initially, with more severe problems or infections the neutrophil stores and productive capacity of bone marrow may be incapable of keeping up with demand. This may result in various levels of neutropenia. **This may be an ominous sign.**

## DECREASED in:

Neutropenia and risk of infection:

**Mild** (1000-2000/cu mm)

**Moderate** (500-1000/cu mm)

**Severe** (<500/cu mm) due to impaired production often can be life threatening

## Bacterial infections including:

Septicemia	Escherichia coli
Military tuberculosis	Typhoid
Paratyphoid	Brucellosis
Tularemia	Bacterial pneumonia
Pseudomonas	Salmonellosis
Brucellosis	Pertussis
Rickettsial	

## Viral infections including:

Infectious mononucleosis	
Hepatitis	Influenza
Measles	Rubella
Psittacosis	

Copper deficiency suspect with WBC <5000 and

Neutrophils <1500/cu mm

Addison's disease Bone marrow depression;

Alcoholics

Ionizing radiation

**Nutrients:** B12, folic acid, other nutrients based on other test findings

## DECREASED in continued:

Diabetes mellitus  
Pernicious anemia  
Aleukemic leukemia  
Aplastic anemia  
Hypersplenism  
Lymphocytosis  
Gaucher's disease  
Myelophthisis  
Anaphylactic shock  
Cachexia  
Renal injury  
Autoimmune diseases: SLE; RA  
Splenic sequestration  
Cancers  
Felty's syndrome (splenomegaly which may cause severe neutropenia and splenectomy may be considered)  
Malaria  
Sarcoidosis

## Drugs:

Chemotherapy drugs    Penicillins  
Gold salts    Diphenylhydantoin  
Aminopyrine    Chloramphenicol  
Sulfonamides    Antibiotics  
Analgesics    Marrow depressants  
Arsenicals    Antithyroid drugs

## INCREASED in:

Acute lymphocytic leukemia  
Chronic lymphocytic leukemia  
Cytomegalovirus (CMV) infection  
HIV/AIDS

## Mononucleosis

Multiple myeloma  
Other viral infections  
Tuberculosis  
Vasculitis  
Whooping cough

Acute infections  
Localized infections  
Postoperative  
Eclampsia  
Gout  
Acute hemolysis of RBC's  
Coronary thrombosis  
Malignancy  
Most bacterial infections  
Allergic purpura  
Kidney disease  
Hereditary giant neutrophilia  
Myelodysplasia  
Newborns  
Strenuous exercise

**Nutrients to consider:** Vit C; Lauricidin;  
Beta-carotene; Thymus; Garlic  
Other nutrients based upon other test findings.



# Focus on Elements

## Lymphocytes

**Clinical range 20-40%**   **Healthy range 25-40%**

### **DECREASED in:**

Immunodeficiency; Viral Infections;  
Protein-calorie malnutrition; Chemotherapy;  
Radiation treatment; Cushing's syndrome;  
Stress; Aplastic anemia; Hodgkin's disease;  
Cancer; Genetic trait; AIDS; SLE ; Renal  
failure; Tuberculosis; Myasthenia gravis;  
Congestive heart failure; Obstruction to  
lymphatic drainage

### **Drugs:**

Corticosteroids

**Nutrients to consider:** Vit C, Beta-carotene, Lauricidin, thymus, zinc

### **INCREASED in:**

**Food allergies; Ulcerative colitis; Crohn's**  
disease; Vasculitis; Leukemia; Neutropenia;  
Addison's disease; Thyrotoxicosis and possible  
goiter; Acute infection recovery; Undulant fever;  
Tuberculosis; Chickenpox; Toxoplasmosis;  
German measles; Mumps; Cytomegalovirus;  
Hepatitis (infectious); Mononucleosis  
(infectious); Lymphocytosis (infectious);  
Pertussis

### **Drugs:**

**Nutrients to consider:** Vit C, Lauricidin,  
Beta-carotene, acidophilus, consider ALCAT  
test for food allergy.



# Focus on Elements –Monocytes

3-8% of the total white blood cell volume. Monocytes can leave the blood stream and enter other tissues and organs in the body, where they have the ability to turn into different types of immune cells called macrophages and dendritic cells.

Commonly, found in high amounts during the recovery phase of infection.

**Clinical range** 1.00-8.50%

**Healthy range** 3.00-7.00%

**Absolute Monocytes:** 0.1-1.0 uL

**DECREASED in:**

**Drugs:** Corticosteroids

**INCREASED in:**

Food allergies; Ulcerative colitis; Sprue; Sarcoidosis; Collagen disease (rheumatoid arthritis and SLE); Leukemias; Cancer; Hodgkin's disease; Lymphoma; Gaucher's disease (lipid storage disease); Postsplenectomy; Agranulocytosis and acute infection recovery; **Protozoan infection** (malaria, kala-azar and trypanosomiasis); Rickettsial infection (Rocky Mountain spotted fever and typhus); Bacterial infections (subacute bacterial endocarditis, tuberculosis and brucellosis); Regional enteritis

**Chemicals:** Tetrachlorethane poisoning

**Nutrients to consider:** Depends on condition.



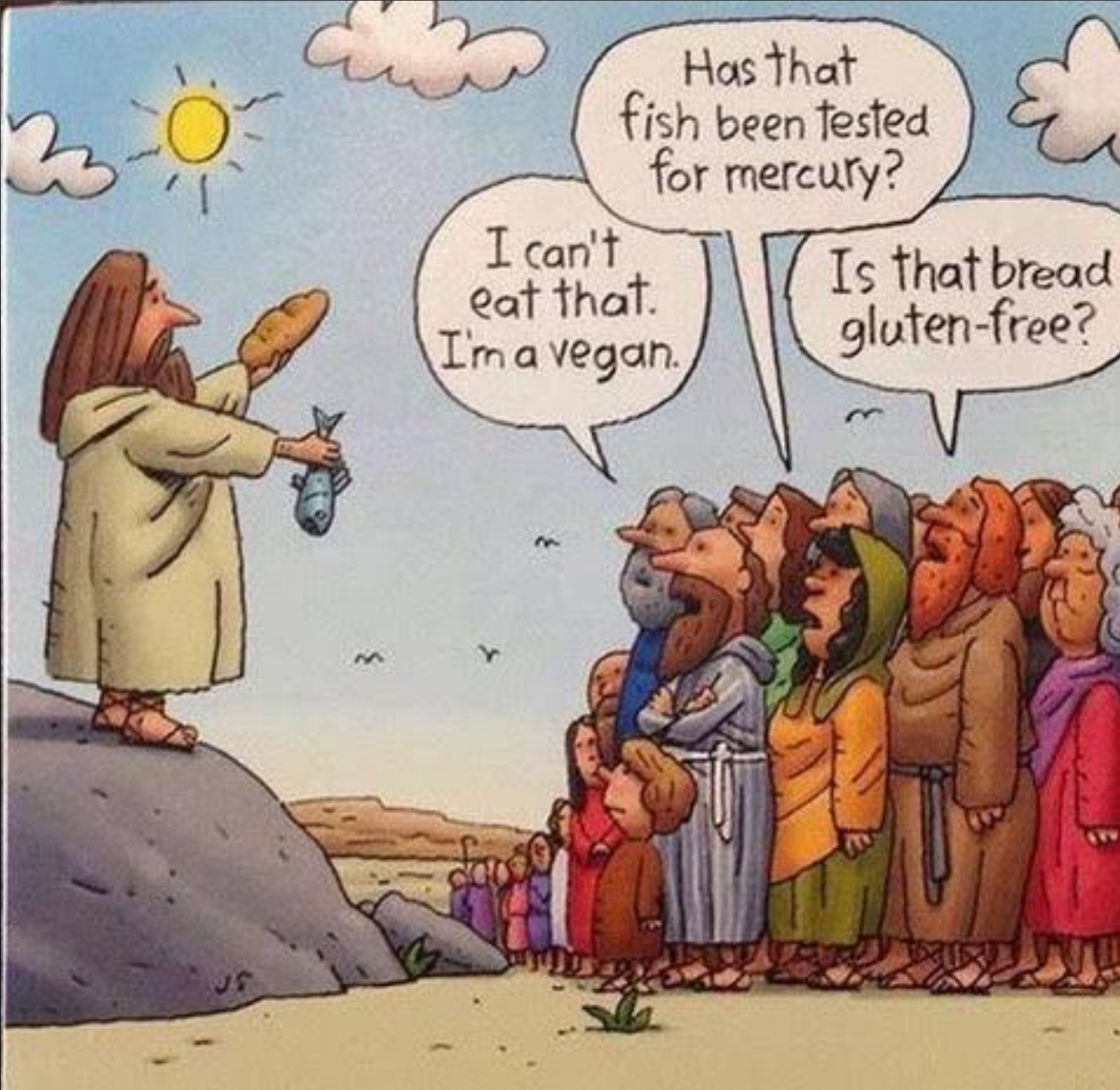




**OVER 5,000 YEARS OF EATING  
BREAD**

**AND IN LESS THAN A DECADE  
EVERYONE IS ALLERGIC TO GLUTEN**









MONDAY, MARCH 17, 2014

# GLUTEN INTOLERANCE IS REALLY GLYPHOSATE POISONING

**"DR. MERKLE, YOU NAILED IT!!! CHRIS COLGIN**

Monday, March 17, 2014

Gluten Intolerance

What if...."g

Gluten has changed.

That "some

Glyphosate companies vaccines, e

The original WHEAT and crackers, b

Nice.

And I really

Monsanto e told the FDA

What Monsanto depressed, are crazy a them what t

I submit: You

euphemisms and hiding wickedness behind medicalese and nebulous diagnoses does no one any good. The guilty go free and the victims are denied proper treatment and timely justice.

Footnotes:

(1) Dr. Ford, a pediatrician in Christchurch, New Zealand and author of The Gluten Syndrome, says he believes the percentage of people who are gluten-sensitive actually could be between 30% and 50%. Source: <http://celiacdisease.about.com/od/glutenintolerance/a/How-Many-People-Have-Gluten-Sensitivity.htm>

(2) "...with respect to glyphosate formulations, experimental studies suggest that the toxicity of the surfactant, polyoxyethyleneamine (POEA), is greater than the toxicity of glyphosate alone and commercial formulations alone." [https://en.wikipedia.org/wiki/Polyethoxylated\\_tallow\\_amine](https://en.wikipedia.org/wiki/Polyethoxylated_tallow_amine)

For further study:

Monsanto's Roundup Causes Gluten Intolerance <http://jonrappoport.wordpress.com/2014/02/21/study-monsantos-roundup-causes-gluten-intolerance/>

Glyphosate, pathways to modern diseases II: Celiac sprue and gluten intolerance

[http://sustainablepulse.com/wp-content/uploads/2014/02/Glyphosate\\_II\\_Samsel-Seneff.pdf](http://sustainablepulse.com/wp-content/uploads/2014/02/Glyphosate_II_Samsel-Seneff.pdf)

Dr. Stephanie Seneff interviewed by Jeffrey Smith of the Institute for Responsible Technology, discussing the paper above.

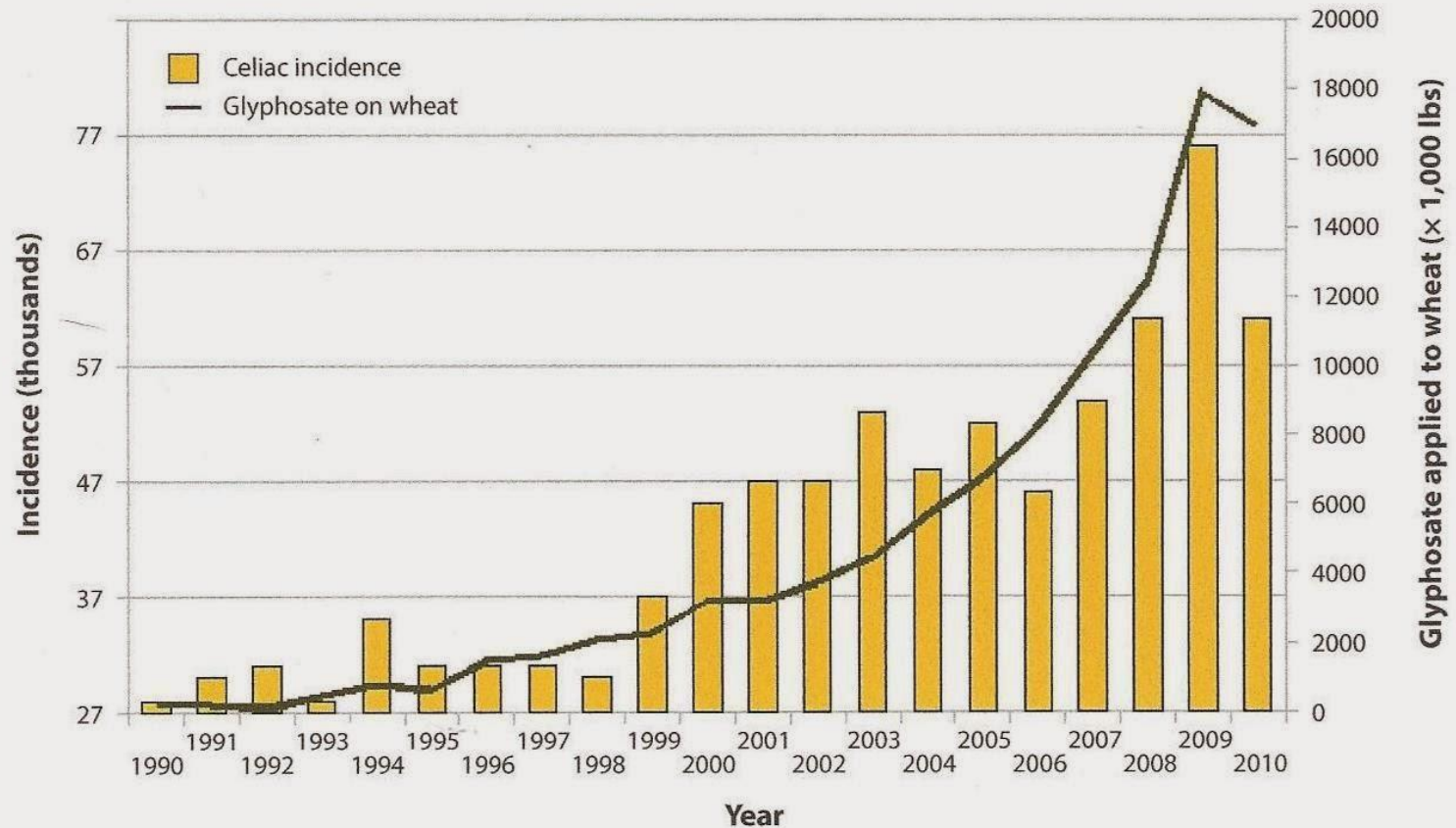
<http://vimeo.com/65914121>



MONDAY, MARCH 17, 2014

GLUTEN INTOLERANCE IS REALLY GLYPHOSATE POISONING

**“DR. MERKLE, YOU NAILED IT!!! CHRIS COLGIN**



# Focus on Elements - Eosinophils

**Clinical range** 1.00-5.00%

**Healthy range** 0.00-4.00%

**Absolute Eosinophils count:** 0.0-0.4uL.

**Decreased in:** none

**Drugs:**

**Increased in:**

Allergic diseases (asthma, hayfever, urticaria and allergic rhinitis)

Allergic purpura

Kidney disease

Parasitic infestation (trichinosis, echinococcus, schistosomiasis, filariasis and fascioliasis)

Mycoses

Some infectious diseases (scarlet fever, erythema multiforme)

Chlamydia

Collagen-vascular diseases (SLE, Rh arthritis, scleroderma,

Dermatomyositis, Periarteritis nodosa and Churg-Strauss syndrome)

Skin diseases (pemphigus and dermatitis herpetiformis)

Pernicious anemia

Leukemia

**Increased in continued:**

Polycythemia

Hodgkin's disease

Lymphomas

Postsplenectomy

IgA deficiency

Neutropenia

Graft-versus-host disease

Post irradiation

Tumors (ovary, bone)

Sarcoidosis

Endocarditis

Genetic traits

Poisoning (phosphorus, black widow spider bite)

**Drugs:** Aspirin

**Nutrients to Consider:** Vit C, Turmeric, Ginger, Bioflavonoids homeopathies, etc...



# SBN MEMBER 6-2-2024

## HAVING PROBLEMS:

- I just got a CT scan done, which came back with no abnormalities, though the stomach was not commented on, so I am having the radiologist look for peptic ulcers. I just got my blood labs back from yesterday. I would love if you would interpret those for me and tell me what you think. Here's the short history: 2 weeks ago I went and ate a spinach salad with salmon. Within half an hour of eating it I began experiencing sharp stomach pains. Previously, I had no issues; in fact, I was feeling quite good. These symptoms have persisted. Every time I eat I get sharp gut pains around 20-30 minutes after eating. I am utterly exhausted and have diarrhea. Please let me know what you would suggest.
- Van Merkle replied on 6/5/24 at 12:48 PM this is easy, very high eosinophils: acute parasites.
- Take Paradex 2 capsules 4 times a day for 4 days.
- probiotics, and might take 2 betaine hcl/meal and be sure to stay hydrated, lot of water.
- Should see some progress quickly with the paradex....
- retest the cbc in a week or 2.
  - Van

Serum Iron			129.000	
White Blood Count	6.300	★	4.200	😊
Red Blood Count	5.170	★	5.270	
Hemoglobin	16.400	high	17.100	😊
Hematocrit	48.900	high	49.100	😊
MCV	95.000	high	93.000	😞
MCH	31.700	high	32.400	😊
MCHC	33.500	★	34.800	😊
RDW	11.900	low	12.200	😞
Platelets	229.000	low	245.000	😞
Polys/Neutrophils (SEGS-PMNS)	37.000	Low	44.000	😞
Lymphocytes	33.000	★	45.000	😊
Monocytes	8.000	high	9.000	😊
Eosinophils	20.000	Very High	1.000	😞
Basophils	2.000	★	1.000	
Neutrophils/Polys (Absolute)	2.400	low	1.800	😊

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The information in this report has not been evaluated by the FDA and is not intended to diagnose, treat, cure, or prevent any disease.

Test Description	Current Rating 06/03/2024	Prior 03/07/2024	Delta
Lymphs (Absolute)	2.100 ★	1.900	
Monocytes (Absolute)	0.500 ★	0.400	
Eosinophils (Absolute)	1.200 Very High	0.000	😞
Basophils (Absolute)	0.100 ★	0.100	
Granulocytes - Immature	0.000 ★	0.000	
Granulocytes - Immature (Abs)	0.000 ★	0.000	

# - Focus on Elements -

## Basophils

**Clinical range** 0.00-1.00%

**Healthy range** 0.00-0.00 %

**Absolute basophil count:** 0.0-0.2uL.

### Decreased in:

- Hyperthyroidism
- Pregnancy
- Acute infection
- Following irradiation and chemotherapy

### Drugs:

- Chemotherapy
- Glucocorticoids

### Increased in:

- Chronic sinusitis
- Leukemia
- Polycythemia
- Hodgkin's disease
- Myeloid metaplasia
- Postsplenectomy
- Chronic hemolytic anemia
- Chickenpox
- Smallpox
- Myxedema
- Nephrosis
- Ionizing radiation
- Foreign protein injection (vaccinations)

**Nutrients:** B12/folic acid, vit C, thymus, bioflavonoids



# NUTRIENTS FOR INFECTION

- **Vitamin C – Vitality C with Ribose**
- **Lauricidin**
- **Acidophilus**
- **Vitamin E**
- **Echinacea Premium/ SBN IFM  
(Immune Food Mushroom Complex)**
- **Oregano Oil**



# CAT SCRATCH FEVER AND MORE CATS, DOGS AND PETS

- **1. Salmonella**
- Usually think of this disease from undercooked meats,
- You can get it from animals around the house too.
- Salmonella is a type of bacteria that lives in the gastrointestinal tract.
- Animals might contract salmonellosis and still appear healthy on the outside.
- These animals will, however, pass the bacteria into their feces. In turn, they can contaminate other parts of their body, such as their fur.



# CAT SCRATCH FEVER AND MORE CATS, DOGS AND PETS

- **2. Ringworm**
- Named deceptively, ringworm actually stems from a fungal infection on the skin. You can get the infection from swimming rooms and locker rooms as well as your infected pets.
- To spot ringworm on yourself or your pets, look for the characteristic reddish ring that may have a darker edge than the center. Also, watch for itchy, red, or scaly patches on the skin or broken blisters that ooze.
- If the infection affects the scalp (or hair in animals), you might see bald patches or brittle hair in one area.
- Ringworm usually responds well to topical treatments.

# CAT SCRATCH FEVER AND MORE CATS, DOGS AND PETS

- Cat Scratch Fever
- According to the CDC, about 40 percent of cats carry the bacteria that cause this infection at some point in their lives.
- Humans can contract it through a playful bite, scratch, or lick of an open wound.
- Sometime after the cat's scratch, you may see the wound puff up and turn red.
- In addition, you may also experience mild flu-like symptoms, but the disease can affect you more seriously too.
- Take measures to get rid of any fleas on your cat, and wash any scratches that do occur with warm water and soap.



# BARTONELLOSIS

## -20 DIFFERENT SPECIES OF BARTONELLA

TRANSMITTED THROUGH A SCRATCH OR BITE FROM INFECTED CATS IS MOST COMMON

- Bartonellosis is an infectious disease produced by bacteria of the genus *Bartonella*. *Bartonella* species cause diseases such as Carrión's disease, trench fever, cat-scratch disease, bacillary angiomatosis, peliosis hepatis, chronic bacteremia, endocarditis, chronic lymphadenopathy, and neurological disorders.

# CAT SCRATCH FEVER AND MORE CATS, DOGS AND PETS



# CAT SCRATCH FEVER AND MORE CATS, DOGS AND PETS

- Cat Scratch Fever
- psychosis-like symptoms including hallucinations, depression and suicidal, overwhelmed, confused, depressed and agitated.
- excessive fatigue, daily headaches, chest pains, shortness of breath (possible panic anxiety), and urinary frequency
- peculiar “stretch marks” around thighs and armpit; marks not caused by fluctuations in weight
- Maybe being treated or diagnoses with schizophrenia
- suspect neurobartonellosis (bacterial infection)
- can affect the brain, eyes, heart or other internal organs. Although serious complications from the disease are rare, they may require intensive treatment. Cases are most common among children younger than age 5 and among people with weakened immune systems.

# CAT SCRATCH FEVER AND MORE CATS, DOGS AND PETS

- **Lyme Disease**
- Next, you can contract Lyme disease from the ticks that live on your household pets. These ticks often get picked up during your pet's outdoor exercise and may hide in the fur for a long time.
- Lyme disease:, you may experience little to no symptoms.
- ullseye rash on your skin, fever, or muscle/joint pain.
  - You'll need medical treatment right away.
- To protect yourself, avoid taking your pets to thick, grassy areas, especially in the spring and summer. When coming indoors, check for ticks on yourself and your pet and remove them immediately. Kill them by wrapping in plastic.

# CAT SCRATCH FEVER AND MORE CATS, DOGS AND PETS

- **Worms**
- You may not realize it, but you can indeed contract worms from your pet. Yet another reason to make sure that you keep up-to-date on all de-worming procedures as well as shots and flea control.
- Worms live inside the gastrointestinal tract as a parasite, and their larvae get passed into your pet's feces.
- Many times, humans contract worms from their pets by walking outside barefoot.
- The worms may break through the skin undetected or get ingested through contamination of the hands.
- CDC estimates human infections into the hundred millions globally, although infections in the U.S. have reduced drastically with improved living conditions.



# CAT SCRATCH FEVER AND MORE CATS, DOGS AND PETS

- **Toxoplasmosis**
- This pet disease happens when people become infected by a microscopic parasite common in pets, **especially cats**.
- The disease can cause mild flu-like symptoms,
- May have larger complications if a woman gets infected while pregnant. With this disease, the best rule is prevention.
- Clean cat litter daily, using gloves if necessary, and avoid direct contact with animal feces. Also, be sure to wash hands thoroughly after gardening. If pregnant, consider having someone else clean up after the pets.



# CAT SCRATCH FEVER AND MORE CATS, DOGS AND PETS

- **Rabies**
- When talking about contagious diseases from pets, you cannot leave out rabies. This virus infects the central nervous system of both animals and humans and is ultimately fatal. To prevent rabies, keep all pets up-to-date on the rabies vaccine and stay away from wild animals.
- For the most part, pets offer love, affection, and laughs. However, you should be aware of these contagious diseases that you can contract from your pets and learn how to prevent them. Thorough cleaning and adequate hygiene for both you and your pets go a long way in prevention.

# IMMUNE/CBC



	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8	Case 9	Case 10
WBC	VHIGH									
Platelets	high									
Polys	high									
Lymps	LOW									
Mono										
Eos										
Baso										

	Conditions	Considerations
Case 1	Low Immune System, Possible Acute Bacterial Infection / Cancer <b>Nutrients:</b> Lauricidin, Vit C, etc.	UA, ESR, Kidney, Liver, Drugs
Case 2		
Case 3		
Case 4		

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case7	Case 8	Case 9	Case 10
WBC	VHIGH		LOW	LOW	HIGH					
Platelets	high			HIGH						
Polys	high	HIGH	LOW							
Lymps	LOW	LOW	high	HIGH						
Mono			HIGH	HIGH	HIGH					
Eos					HIGH					
Baso					HIGH					

	Conditions	Considerations
Case 5	Allergies – Environmental, Food, Toxic – Anaphylactic, Cancer <b>Nutrients:</b> Vit C, Lauricidin, Avoid Dairy	Digestion, Thyroid, Proteins, Drugs
Case 6		
Case 7		
Case 8		

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8	Case 9	Case 10
WBC	VHIGH		LOW	LOW	HIGH	high				
Platelets	high			HIGH						
Polys	high	HIGH	LOW							
Lympts	LOW	LOW	high	HIGH						
Mono			HIGH	HIGH	HIGH					
Eos					HIGH					
Baso					HIGH					

	Conditions	Considerations
Case 5	Allergies – Environmental, Food, Toxic – Anaphylactic, Cancer <b>Nutrients:</b> Vit C, Lauricidin, Avoid Dairy	Digestion, Thyroid, Proteins, Drugs
Case 6	Chronic Infection <b>Nutrients:</b> Lauricidin, Vit C, Beta Carotene, Thymus, Echinacea	UA, Stool, Drugs
Case 7		
Case 8		

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8	Case 9	Case 10
WBC	VHIGH		LOW	LOW	HIGH	high			LOW	LOW
Platelets	high			HIGH				HIGH	HIGH	LOW
Polys	high	HIGH	LOW							
Lymps	LOW	LOW	high	HIGH			HIGH		LOW	LOW
Mono			HIGH	HIGH	HIGH			HIGH		
Eos					HIGH					
Baso					HIGH					

	Conditions	Considerations
Case 9	Bad Sign/Low Immune System, Possible Cancer, Chronic Infection <b>Nutrients:</b> Lauricidin, Vit C, Beta Carotene, Thymus, Echinacea	UA, ESR, CRP, Proteins, Drugs
Case 10	Very Bad, Probably Cancer <b>Nutrients:</b> Lauricidin, Vit C, Beta Carotene, Thymus, Echinacea	UA, Metabolic UA, Proteins, Liver, Thyroid, Drugs





Fetterman Events

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**Therasage** is the gold standard in integrated infrared technology with over 20 years of first-hand experience in the development and manufacturing of infrared wellness products. We are founded on a deeply rooted desire and mission to bring affordable, high-quality infrared devices that really work to our global community.



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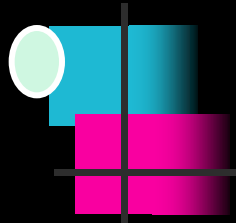
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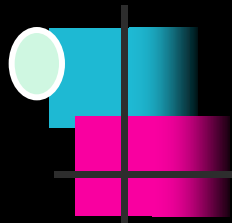


# Mission Possible

I implore you to take up this cause, to make this your mission to save lives, to take responsibility, to care...to do whatever it takes. You have the legal authority granted by your Doctor of Chiropractic degree. Don't count or rely on the medical community, for it is too busy and is controlled by what the insurance dictates. You will be better. You have to be, because it is necessary. You will do what is right and be honest. When you do this, you will truly be a doctor – one that makes a real difference and saves lives. It is up to you. Can your patients count on you? If not you...WHO?

Van D. Merkle





**From:** J AXXXXXX [mailto:]  
**Sent:** Friday, October 03, 2008 4:59 PM  
**To:** Pam  
**Subject:** Joan S.

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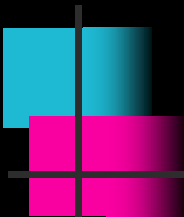
I am very sad to inform you that my mom, Joan S. died on August 17th. We had been optimistic as the tumors in her lung did not increase in size from February through the first of June. However, the next CT scan taken at the end of July when she was admitted to the emergency room showed they had doubled in size in less than two months. The hospice doctor said that that type of acceleration in lung cancer is not unusual, but it shocked us. She passed three weeks later.

Nonetheless, I want to thank you for all you did for her, but most importantly, for giving us hope after the oncologist told her the prognosis. I believe she had a higher quality of life with more energy because of the supplements she was taking. Most of all, we had four-plus months of wonderful times together, times spent with optimism in our hearts rather than horrible dread. It made all the difference in the world.

Bless you all as you continue your work to promote health and prevent cancer from occurring in the first place.

Best regards,  
Jill AXXXXXX





# Can you get all the nutrients you need from food? (Chemical Farming)

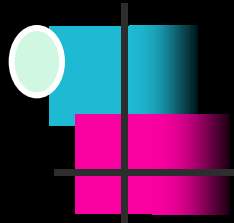
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**USDA** nutrient data from 1975 and 1997 has revealed a disturbing trend:

- Average calcium levels in 12 fresh vegetables have declined **27%**
- Iron levels have dropped **37%**
- Vitamin A levels, **21%**
- Vitamin C levels, **30%**

**British** nutrient data from 1930 and 1980 indicate reductions of essential minerals in both fruits and vegetables:

- Average calcium content declined **19%**
- Iron, **22%**
- Potassium **14%** in the 20 vegetables compared.



## WOW CASE 12-10-2001

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- Patient Lisa B: primary dx of Rh arthritis
- In less than 2 months on her “program” she is off all drugs: Embrel, Methotrexate, Celebrex, Darvacet, Percodan, Vicodin, Norflex, Lasix

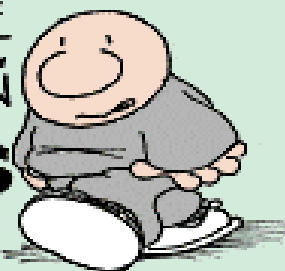


# ZIGGY...

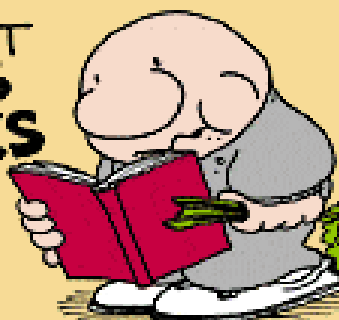
by Tom Wilson & TOM II



WHEN IT COMES TO TRYING  
TO LOSE  
WEIGHT,  
I'VE BEEN  
AT IT FOR  
**YEARS**



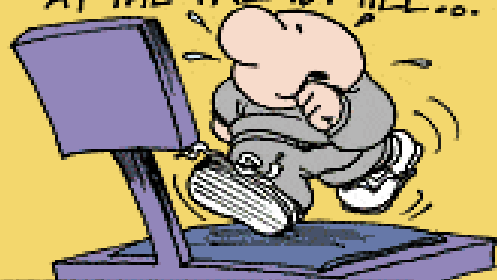
...I SPENT  
**MONTHS  
& WEEKS**  
ON EVERY  
DIET!



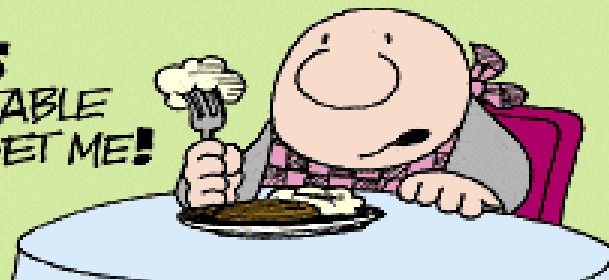
...SPENT  
**DAYS**  
AT THE  
GYM!



...AND **HOURS & MINUTES**  
AT THE TREADMILL...



...BUT IT'S THE  
**SECONDS**  
AT THE DINNER TABLE  
THAT USUALLY GET ME!

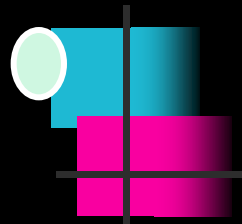


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TOM WILSON

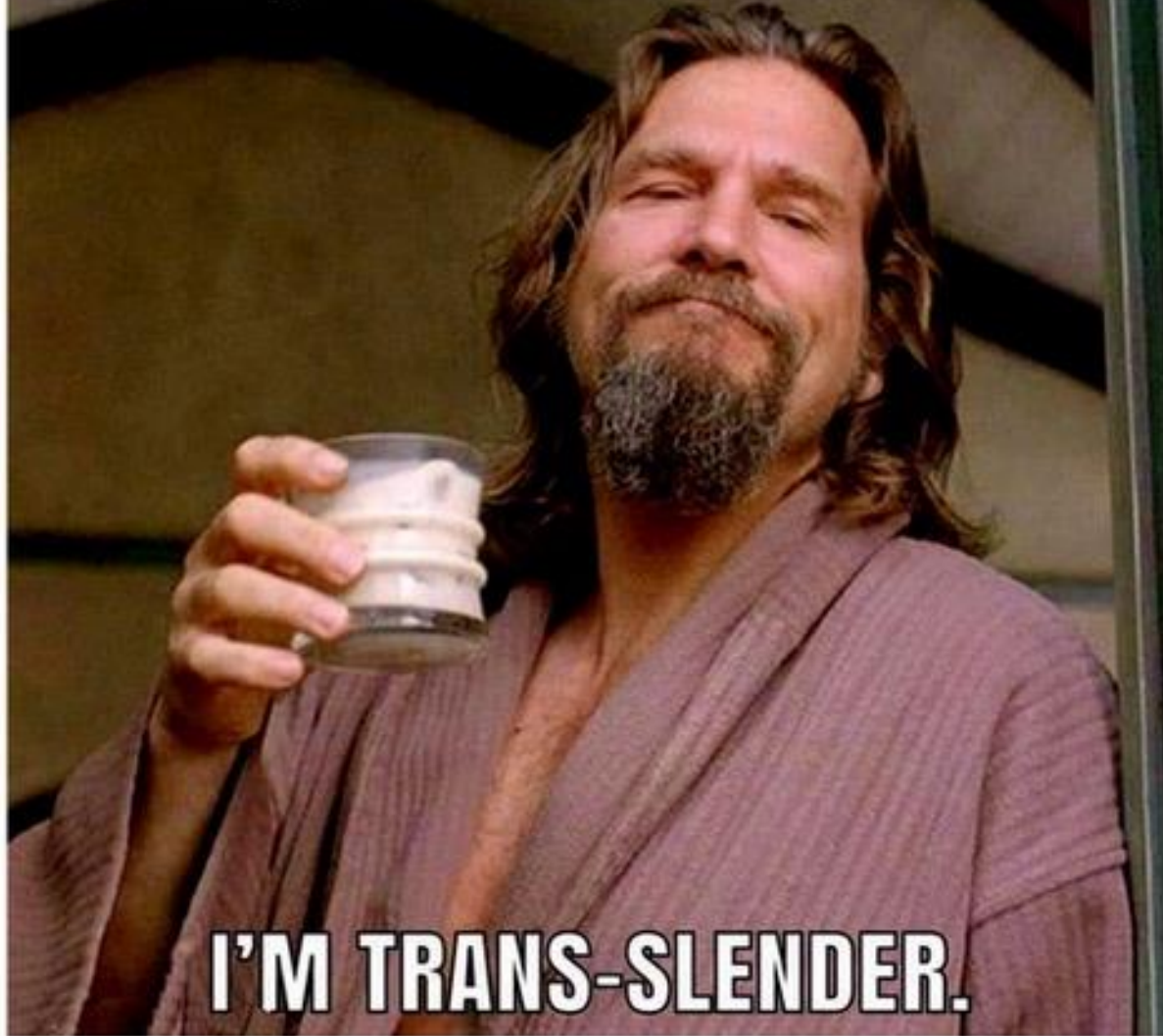
Newsweek  
July 3, 2000







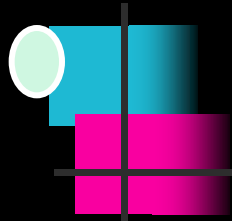
**I'M FAT, BUT I IDENTIFY AS SKINNY.**



**I'M TRANS-SLENDER.**







# Radical Reduction: the benefits of stomach stapling for teenagers

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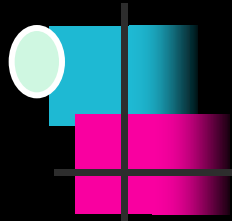
**Health and medicine explained.** *By Amanda Schaffer*

Posted Tuesday, Aug. 22, 2006, at 7:27 AM ET

Last month, the already grim prognosis for heavy kids took a turn for the even worse. A study of more than 100,000 women, published in the *Annals of Internal Medicine*, found that those who were overweight at age 18 were more likely to die prematurely in middle age. And research published in the *Journal of the American Medical Association* showed that people who develop type 2 diabetes—a condition associated with obesity—before the age of 20, as opposed to later, are at greater risk of end-stage kidney disease and death before the age of 55. Obesity at any age is associated with health woes like sleep apnea, fatty liver disease, atherosclerosis, loss of vision, and some types of cancer, in addition to diabetes. But when these conditions appear in the young obese, the long-term ramifications are just scary.

How about a radical solution—stomach stapling for teenagers? It may sound crazy and desperate, but several major children's hospitals, including Cincinnati Children's Hospital Medical Center, Texas Children's Hospital, and Lucile Packard Children's Hospital at Stanford, have started offering obesity surgery in recent years. *Nightline* recently followed a 16-year-old Texas girl who underwent stomach stapling and lost 129 pounds in six months, down from a starting weight of 368.





# Radical Reduction...cont.

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- To be sure, obesity surgery is a risky proposition. One small study, published earlier this year in the *Journal of Pediatric Surgery*, found that roughly 40 percent of kids who underwent gastric bypass experienced some kind of complication, such as intestinal leakage, dumping syndrome, bowel obstruction, wound infection, or a nutritional deficiency. (A similar complication rate has been found in adults.) Nutritional deficiencies, especially of calcium, iron, vitamin B-1 and vitamin B-12, may occur partly because patients are eating less and partly because the operation bypasses a portion of the digestive tract that efficiently absorbs many vitamins and minerals.
- The potential for deficiencies means that patients must adhere to strict guidelines. All patients must eat more lean, high-quality protein; exercise; and take vitamins and minerals for the rest of their lives. Teenage girls must take additional calcium and iron.





# The American Academy of Pediatrics recommends weight loss drugs and surgery in children as young as 12 and 13.

## January 2023

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- The weight loss drug Wegovy causes gastrointestinal side effects, including nausea and vomiting, as well as concerns of pancreatitis, pancreatic cancer and retinopathy complications, including hemorrhage and blindness
- Subjecting children to surgery for weight loss is egregious, as it can lead to permanent complications and even death; the procedures may also involve removing a part of the body, which cannot be undone
- The AAP guidelines make no mention of controlling exposure to obesogens, ultraprocessed foods and other drivers of childhood obesity
- Part of the problem with the conventional model for treating childhood obesity is that children receive flawed nutritional guidance focused on reducing saturated fats and other whole foods, while promoting vegetable oils and low-fat diets
- By resorting to drugs and surgery, children may be saddled with a lifetime of related side effects, for a condition they could have likely reversed using natural lifestyle strategies





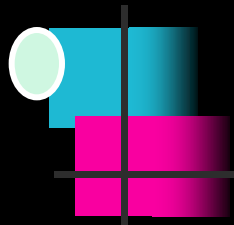
<https://www.niddk.nih.gov/health-information/weight-management/prescription-medications-treat-overweight-obesity>

## Weight medications for children 2-3-2023

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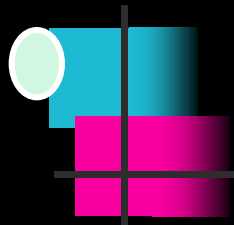
- Two prescription **medications**, orlistat (Xenical) 2 and liraglutide (Saxenda),
- 3 are **approved** by the FDA for **children** ages 12 and older.
- A third prescription **medication**, setmelanotide (IMCIVREE), 4 is **approved** by the FDA for **children** ages 6 years and older who have rare genetic disorders causing obesity.





- Approved for treating obesity — liraglutide (Saxenda) and semaglutide (Wegovy) — **cost around \$1400 per month.**
- anti-obesity medicines aren't covered by Medicare nor by many employer-sponsored commercial plans.





- Although these drugs are very effective for weight loss and treating diabetes, there can be adverse effects, primarily gastrointestinal, that limit treatment continuation. **Nausea is the most common side effect** and usually diminishes over time.
- **Drug-induced acute pancreatitis**





# What Happens When Newer Weight Loss Meds Are Stopped? **Medscape 3-30-2023**


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- Tirzepatide (Mounjaro) has been fast-tracked for approval for weight loss by the US Food and Drug Administration this year, and in the first of the series of studies looking at its effect on obesity, the SURMOUNT-1 trial, **tirzepatide demonstrated a mean weight loss of around 22% in people without diabetes**, spurring significant off-label use.
- The [STEP-1 trial extension](#) showed an initial mean body weight reduction of 17.3% with weekly semaglutide 2.4 mg over 1 year. On average, **two thirds of the weight lost was regained by participants within 1 year of stopping** semaglutide and the study's lifestyle intervention. Many of the **improvements seen in cardiometabolic variables, like blood glucose and blood pressure, similarly reverted to baseline.**





# What Happens When Newer Weight Loss Meds Are Stopped? **Medscape 3-30-2023**

- These data together demonstrate that medications are effective for durable weight loss **if they are continued**.
  - **Anti-obesity medications are prescribed to less than 3%** of eligible people in the US, and the average duration of therapy is less than 90 days.
  - Metabolic adaptation in people after weight loss, combined with physiologic changes that increase appetite and decrease satiety, many people create a positive energy balance that results in weight regain. **(REBOUND EFFECT OF STOPPING THE MEDS) This has been observed in reality TV shows such as *The Biggest Loser*:**
  - **It's biology, not willpower.**
  - Patients are too often blamed when their weight goes back up after medications are stopped.
  - Nobody would be surprised if someone's blood pressure went up if their antihypertensive medications were stopped. Why do we think so differently when treating obesity?
- 





# What's It Like to Take Ozempic? A Doctor's Own Story

Nicole Swiner, MD Disclosures March 08, 2023

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- Each time, the efforts worked for a short while, particularly when I followed good portion control and practiced moderate exercise. Once the side effects (ie, tachycardia, palpitations, mood changes, constipation) became intolerable, or I became tired or fearful of being on the medications too long, I'd stop and I would regain some of the weight.
- Saxenda when it arrived on the market, via some samples that our pharmaceutical representative brought, both out of curiosity and to see if it would help me lose the stubborn baby weight. I ended up stopping the daily injections after my second or third week because of nausea and vomiting. I took a break, got a prescription for antinausea medicine, and tried again because it did indeed decrease my appetite. However, when I took my prescription to the pharmacy, my insurance wouldn't cover it. It happens to doctors, too.





# What's It Like to Take Ozempic? A Doctor's Own Story

Nicole Swiner, MD Disclosures March 08, 2023

- With these new medications, I noticed that both my patients and I didn't complain as much about nausea and vomiting, **but I did experience stomach upset, constipation, and acid reflux.**
- The appetite suppression is effective. It **slows down the emptying of the gut so I feel full longer.** I've lost 30 lb with these weekly injections and would like to lose another 20 lb. I follow a routine of reasonable, portion-controlled eating and moderate exercise (30 minutes of cardiovascular activity at least two to three times a week).
- **Discontinuing the medications may cause rebound weight gain, especially if I'm no longer following a routine of healthy eating and/or moderate exercise.** I deal with minimal constipation by taking stool softeners, and I take antacids for acid reflux.





# What's It Like to Take Ozempic? A Doctor's Own Story

Nicole Swiner, MD Disclosures March 08, 2023

- Also remind them that they can't rely solely on the medication but need to practice portion control and healthier eating and to exercise more.
- Ozempic for diabetes, and recently we were told that a refill would cost about \$1500 a month, even with insurance.
- "Covered" doesn't necessarily mean affordable.
- **Note:** Dr Swiner provides consulting services and gives recommendations on health and wellness **but no longer directly prescribes medications to patients.**





# Is Ozempic insulin? | SingleCare

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Tracey Barry MS

replied on 10/30/23 at 1:26 PM

This is the second doctor in one week have their patient start a GLP-1 drug (like Ozempic) and their tumor markers start increasing.

Jun 29, 2022 **Ozempic/Wegovy** is a non-**insulin** medication for Type 2 diabetes that **lowers blood glucose levels by stimulating insulin secretion from the pancreas**. It is not the same as **insulin**, which **is** a hormone produced by the beta cells in the pancreas. Learn how to use **Ozempic** and other Type 2 diabetes medications, and the differences between **Ozempic** and **insulin**.

VAN: remember that cancer cells have 10-15 times more insulin receptors sites than regular cells. so Ozempic will have similar effects as insulin and insulin is known to increase cancer.





# Most Stop Taking Weight Loss Drugs Within 1 Year

Nancy A Melville December 06, 2023 Medscape

- **Discontinuing Medications Means Regaining Appetite**

- 10% weight loss at 12 months compared carrier.
- 1 year after discontinuation of treatment two thirds of their lost weight was regained, and the cardiometabolic improvements with the weight loss were reversed.

- "your appetite comes back in spades when you take away the effect of these hormones,"

- "When you lose weight, you lose lean body mass and fat mass, but when you regain, it's primary fat mass. Meaning you will gain weight easier and faster."





# Weight Loss Drugs- Disaster in the Making

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- Ravenous after going off drugs.
- Drugs delay stomach emptying for as much as 2 days- feel full longer.
- Food is not being digested but is putrefying/rotting in the stomach.
- Drugs can cause gastric paresis/paralysis of the stomach, which is a serious condition.
- Surgeries are more difficult with intubation being required because the food is still in the stomach and when laying down can regurgitate and go down the trachea into the lungs





# Weight Loss Drugs- Disaster in the Making

- *The prescribing information for Wegovy and Saxenda does caution about a host of **serious side effects including inflammation of the pancreas, gallbladder problems, blocked intestines, kidney problems, serious allergic reactions, increased heart rate, suicidal thoughts, and changes in vision** or people who also have diabetes. A warning about **ileus, or blocked intestines**, was also just added to Ozempic's warning label.*
- *The labels also note the most common side effects are **nausea, vomiting and constipation**. They also strongly warn people with a **history of certain types of hereditary thyroid cancers against taking the medications.**"*
- **Dr.: It will take care of itself. People are quitting these meds in droves after a few months of unrelenting side effects and most thought they didn't have to take it for life. Most will quit and end up weighting even more. Phen Fen and HCG all over again. One of the worst side effects is Gaunt face not to mention gastroparesis that is permanent. Lawsuits are already started. This is a medication a patient has to take for life, or pounds come back.** Good luck with that alone.





# Weight Loss Implants Once or Twice a Year

## February 28, 2024

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- Vivani Medical Announces Positive NPM-115 Preclinical Weight Loss Data Comparable to Ozempic®/Wegovy® and Discloses NPM-139 as Semaglutide as **Strategy Shifts to Prioritize Obesity Portfolio**
- *NPM-115 (exenatide implant) generated significant weight loss comparable to injectable semaglutide (Ozempic®/Wegovy®) from a single administration with **expected twice-yearly dosing***
- *Vivani discloses semaglutide as the active pharmaceutical ingredient in NPM-139, with the added potential benefit of **once-yearly dosing***
- *NPM-115 and NPM-139 are miniature, subdermal implants in development for chronic weight management **designed to guarantee medication adherence and potentially improve treatment tolerability by providing smooth and steady delivery of GLP-1 therapy***
- ALAMEDA, Calif.--(BUSINESS WIRE)-- Vivani Medical, Inc. (Nasdaq: [VANI](#)) (“Vivani” or the “Company”), an innovative, preclinical-stage biopharmaceutical company developing novel, long-term drug implants, today announced positive preclinical data on weight loss effects for NPM-115, the Company’s miniature, twice-yearly, exenatide implant under development for the treatment of chronic weight management. The Company also disclosed that semaglutide is the active pharmaceutical ingredient in NPM-139, a miniature, subdermal GLP-1 implant in development for chronic weight management, with the added potential benefit of once-yearly administration. These developments are part of a strategic shift to prioritize the Company’s obesity implants based on emerging data regarding the potential for high-dose GLP-1 products to improve health outcomes for obese and overweight patients.





A thousand words can be generated by just this one picture. This is Tesla's roadside assistance vehicle filling up at the gas pump.





# How to Prescribe Physical Activity in Patients With Obesity

Carla Nieto Martínez February 09, 2024 MEDSCAPE

Add to Email Alerts

6


336

Exercise should no longer be a mere "complement" or a standard recommendation within healthy lifestyle guidelines, say experts.

**Recent evidence confirms its physiological importance and endorses its beneficial and therapeutic effects on overall health, particularly in the case of obesity and its comorbidities. These findings emphasized the reasons to include exercise prescription in addressing this condition.**

This conclusion emerged from discussions among experts in Physical Activity and Sports Sciences during the XIX Congress of the Spanish Society for Obesity, where the role of physical exercise as a therapeutic strategy was analyzed from various perspectives.

Javier Butragueño, PhD, coordinator of the Exercise Working Group at the Spanish Society of Obesity, emphasized the need to "reposition" the role of exercise and the message conveyed to the population. "We must move beyond the typical recommendation to 'just walk' and rethink this message. When working with patients with obesity, you realize that, for example, the guideline of 10,000 steps per day makes little sense for those who weigh 140 kg, have been sedentary for a long time, and have not reached 2000 daily steps. Clinically, it becomes evident that current recommendations may not align with the needs of these patients," he said.



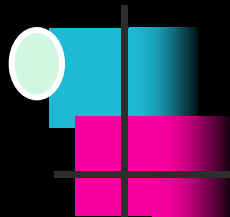
# Temporary Gut Liner Lowers Weight, A1c

Becky McCall

April 19, 2024 Medscape

- It lines the first 60 cm (23 inches) of the small intestine
- Because the food bypasses the small intestine, the first time the food is encountered is in an area where it is not normally found, and this causes a reaction where signals are sent to the brain to stop eating.
- A total of 13/90 (14%) of patients had early removal of the gut liner due to gastrointestinal hemorrhage (five), liver abscess (two), other abscess (one), and gastrointestinal symptoms (five), but they all made a full recovery; after removal, most experienced benefit despite the adverse event, reported Ryder.
- EndoBarrier is currently not approved in the United States. "





S. XXXXXXXX

1<sup>st</sup> Test:

10/17/2001

2<sup>nd</sup> Test:

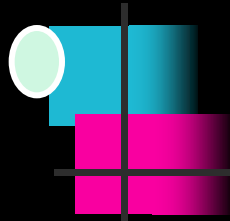
10/17/2003

Gastric bypass

2 years ago

LOST 40 LBS

Test Description	Current Result Date: 10/17/2003	Current Rating	Prior Result 10/17/2001	Delta	Healthy	Clinical	Units
Glucose	105.00	hi	315.00	☹	84.10 - 100.01	65.00 - 109.00	mg/dL
Hemoglobin A1C (Gly-Hgh)	5.40	Opt	9.20	☹	4.61 - 5.40	4.50 - 5.70	%
Uric Acid	7.80	hi	6.70	☹	4.10 - 6.00	2.40 - 8.20	mg/dL
BUN (Blood Urea Nitrogen)	11.00	lo	8.00	☹	13.10 - 18.00	5.00 - 26.00	mg/dL
Creatinine	0.70	Opt	0.70		0.61 - 0.90	0.50 - 1.50	mg/dL
BUN / Creatinine Ratio	15.00	Opt	11.00	☹	13.10 - 20.00	8.00 - 27.00	ratio
Sodium	143.00	Opt	140.00	☹	140.10 - 144.00	135.00 - 148.00	meq/dL
Potassium	3.90	lo	4.60	☹	3.91 - 4.60	3.50 - 5.50	meq/dL
Chloride	106.00	hi	102.00	☹	100.10 - 106.00	96.00 - 109.00	meq/dL
Magnesium	2.10	lo	2.40	☹	2.21 - 2.50	1.60 - 2.60	mg/dL
Calcium	9.60	lo	9.70	☹	9.71 - 10.10	8.50 - 10.60	mg/dL
Phosphorus	4.10	hi	2.50	☹	3.41 - 4.00	2.50 - 4.50	mg/dL
Calcium/Albumin Ratio	2.28	Opt	2.31		2.10 - 2.50	2.03 - 2.71	ratio
Total Protein	6.50	lo	7.20	☹	7.11 - 7.61	6.00 - 8.50	gm/dL
Albumin	4.20	Opt	4.20		4.10 - 4.51	3.50 - 5.50	gm/dL
Globulin	2.30	lo	3.00	☹	2.81 - 3.51	1.50 - 4.50	gm/dL
A/G Ratio	1.80	hi	1.40	☹	1.22 - 1.60	1.10 - 2.50	ratio
Total Bilirubin	0.60	Opt	0.40		0.39 - 0.93	0.10 - 1.20	mg/dL
Alkaline Phosphatase 25-150	67.00	Opt	112.00	☹	66.00 - 108.00	25.00 - 150.00	IU/L
LDH	131.00	Opt	233.00	☹	120.10 - 160.00	100.00 - 250.00	mu/mL
SGOT (AST)	15.00	lo	22.00	☹	18.10 - 26.00	6.00 - 40.00	mu/mL
SGPT (ALT)	18.00	lo	44.00	☹	18.10 - 26.00	6.00 - 40.00	mu/mL
GGT	11.00	Opt	30.00		10.10 - 36.00	6.00 - 65.00	mu/mL
Serum Iron	93.00	Opt	78.00	☹	85.10 - 120.00	35.00 - 155.00	mcg/dL
Ferritin	80.00	Opt	129.00		30.10 - 218.30	22.00 - 322.00	ng/mL
Cholesterol	126.00	lo	148.00	☹	150.10 - 180.00	100.00 - 199.00	mg/dL
Triglyceride	81.00	Opt	135.00	☹	80.10 - 115.00	10.00 - 199.00	mg/dL
HDL Cholesterol	56.00	Opt	34.00	☹	55.10 - 120.00	40.00 - 150.00	mg/dL
LDL Cholesterol	53.00	Opt	87.00		50.10 - 75.10	6.00 - 99.10	mg/dL
VLDL Cholesterol	16.00	Opt	27.00	☹	5.10 - 20.10	4.10 - 40.10	mg/dL
Total Cholesterol / HDL Ratio	2.20	Opt	4.30	☹	0.00 - 4.00	0.00 - 5.00	ratio
T4 Thyroxine	8.40	Opt	9.30	☹	7.10 - 9.00	4.50 - 12.00	mcg/dL
T3 Uptake	32.00	Opt	30.00	☹	29.10 - 35.10	24.00 - 39.00	%
T7 Free Thyroxine Index	2.60	lo	2.70	☹	2.61 - 3.60	1.20 - 4.90	
White Blood Count	4.20	lo	7.00	☹	5.10 - 8.00	4.00 - 10.50	k/cumm
Red Blood Count	4.21	lo	4.35	☹	4.51 - 5.50	3.80 - 5.60	m/cumm
Hemoglobin	13.20	lo	13.30	☹	13.91 - 15.00	11.50 - 17.00	gm/dL
Hematocrit	37.50	lo	37.80	☹	39.51 - 47.00	34.00 - 50.00	%
MCV	89.00	Opt	87.00		85.10 - 97.00	80.00 - 98.00	cu.m
MCH	31.20	Opt	30.60		28.10 - 32.00	27.00 - 34.00	pg
MCHC	35.10	hi	35.30	☹	33.10 - 34.99	32.00 - 36.00	%
Platelets	175.00	lo	279.00	☹	175.10 - 250.00	140.00 - 415.00	k/cumm
Polys (SEGS-PMNS)	55.00	lo	60.00	☹	55.10 - 65.00	40.00 - 74.00	%
Lymphocytes	36.00	Opt	28.00		25.10 - 40.00	14.00 - 46.00	%
Monocytes	6.00	Opt	8.00	☹	5.10 - 7.10	4.90 - 13.00	%
Eosinophils	2.00	Opt	3.00		0.00 - 4.00	0.00 - 7.00	%
Basophils	1.00	hi	1.00	☹	0.00 - 0.00	0.00 - 3.00	%
ESR (Erythrocyte Sed Rate)	2.00	Opt	9.00	☹	0.00 - 8.00	0.00 - 30.00	mm/HR
CRP C-Reactive Protein	0.40	hi	6.20	☹	0.00 - 0.00	0.00 - 4.90	mg/L
Creatine Kinase	76.00	Opt	106.00		50.50 - 150.00	24.00 - 204.00	u/L



# Death Risk Drops After Bariatric Surgery in Obese Patients

by Kristen Monaco, Staff Writer, MedPage Today August 06, 2019

- **But gastric bypass, sleeve gastrectomy had higher risk for late adverse GI events**
- Bariatric surgery was associated with an extended lifespan in patients with obesity, but also carried a higher risk of at least one hospital admission for late adverse events, according to a French study.
- In a cohort study of nearly 9,000 bariatric surgery patients, those who underwent gastric bypass surgery had a 36% reduced mortality risk compared with matched controls with obesity who did not undergo surgery (hazard ratio 0.64, 95% CI 0.52-0.78), reported Jérémie Thereaux, MD, of the Caisse Nationale d'Assurance Maladie in Paris, and colleagues.
- **During the nearly 7-year follow-up period**, patients who opted for sleeve gastrectomy saw **a 62% reduced risk for mortality versus those who didn't undergo surgery** (HR 0.38, 95% CI 0.29-0.50), they stated in the [\*Lancet Diabetes & Endocrinology\*](#).
- However, prolonged mortality associated with bariatric surgery also came with some additional medical risks. Compared with matched controls, patients who underwent gastric bypass surgery saw a higher incidence of a few gastrointestinal (GI)-related outcomes:
- Invasive GI surgery or endoscopy: incidence rate ratio 2.4 (95% CI 2.1-2.7)
- GI disorders not leading to invasive procedures: IRR 1.9 (95% CI 1.7-2.1)
- Nutritional disorders: IRR 4.9 (95% CI 3.8-6.4)
- **Those who had undergone a previous bariatric surgery procedure within 4 years prior were excluded.**
- **"They will have to comply with multidisciplinary careful lifelong follow-up given the risk of late adverse events."**



# Bariatric Surgery Linked to Protection Against Severe COVID-19\*\*\*

— Obesity is a "modifiable risk factor" for severe COVID-19, researchers say

by [Kristen Monaco](#), Staff Writer, MedPage Today December 29, 2021

Substantial weight loss -- even if achieved through bariatric surgery -- improved COVID-related outcomes among people with obesity, a new study found.

- People who underwent bariatric surgery prior to the pandemic saw a similar rate of positive COVID-19 test results as among propensity score-matched non-surgical controls of similar baseline BMI (9.1% vs 8.7%,  $P=0.71$ ), reported Steven E. Nissen, MD, of the Cleveland Clinic, and colleagues.

- But what happened after infection was a different story, the group reported in [JAMA Surgery](#).

- **Despite a mean BMI still in the obese range (38.1) at the time of testing positive, the surgical weight loss group had nearly half the risk of hospitalization as controls, for whom mean BMI remained at 46.3 (adjusted HR 0.51, 95% CI 0.35-0.76,  $P<0.001$ ).**

- **Those who underwent weight loss surgery also saw a 63% lower risk for needing supplemental oxygen and a 60% lower risk for having a severe case of COVID-19, both statistically significant compared with nonsurgical controls.**

- "Because conducting clinical trials in this setting is not feasible, the findings of this study represent the best available evidence on the implications of a successful weight loss intervention for COVID-19 outcomes," Nissen's group explained. They added that this study clearly supported the notion that obesity can indeed be a "modifiable risk factor" for the severity of COVID infection.

- The benefits of bariatric surgery also extended beyond COVID-19, as the surgical group saw a 53% lower 10-year cumulative incidence of death from all other causes (4.7% vs 9.4%,  $P<0.001$ ).

- **Not surprisingly, those who underwent surgery lost 18.6% (95% CI 18.4-18.7%,  $P<0.001$ ) more weight over the decade prior to the pandemic. So by the time these individuals tested positive for COVID-19, the surgical group patients achieved a 20.0-kg (44.1 lb) lower body weight and better glycemic control.**

- "COVID-19 infection is a proinflammatory and prothrombotic disease process that may be favorably altered by surgically induced weight loss through the amelioration of obesity-mediated hyperinflammation, hypercoagulopathy, and metabolic derangements," the researchers highlighted. They added that other benefits of bariatric surgery -- like improvement in breathing and lung mechanics, reduction in hypertension and other comorbidities like cardiovascular disease, sleep apnea, kidney function, and more -- also likely played a role in mitigating COVID-19 outcomes for these patients.

- In an [accompanying commentary](#), Paulina Salminen, MD, PhD, of the University of Turku, Finland, and colleagues pointed out that these findings should reframe how people view bariatric surgery, especially at this time.

- "In many countries, during the ongoing COVID-19 pandemic, metabolic surgery has been evaluated merely as an elective surgery that can be postponed with minimal adverse consequences," they wrote. "This approach, however, overlooks severe obesity as a life-threatening and life-limiting disease and does not acknowledge the intertwined double pandemic of COVID-19 and obesity."

- **The takeaway is simple, they wrote: Metabolic surgery should be considered as medically necessary -- not elective.**

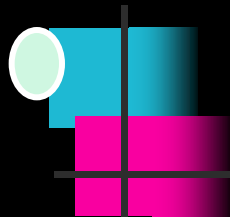
- With the [American Society for Metabolic and Bariatric Surgery](#) throwing support behind this mantra, Salminen's group referenced recent [guidelines and consensus statements](#) to help guide hospitals in resuming these clinically necessary procedures.

- Nissen and colleagues' retrospective study observed a total of 20,212 patients for a median of 6.1 years. The 5,053 patients in the surgical group were matched 1:3 to patients who did not undergo for surgical intervention for their obesity.

- As is typical with the bariatric surgery patient population, nearly 80% were female and baseline median BMI was 45. Two-thirds of the surgical population opted for Roux-en-Y gastric bypass and a third underwent sleeve gastrectomy.

- COVID-related outcomes were assessed for those who tested positive between March 1, 2020, and March 1, 2021.





# Mercury Compound Found In Fish Damages Pancreatic Cells

*ScienceDaily* (Sep. 29, 2006) — Researchers in Taiwan say they have established for the first time that the mercury compound present as a contaminant in some seafood can damage insulin-producing cells in the pancreas.

- In their experiments, Shing-Hwa Liu and colleagues exposed cell cultures of insulin-producing beta cells to methylmercury. They used concentrations of methylmercury at about the same levels as people would consume in fish under the U. S. Food and Drug Administration's recommended limits.

Previous studies have shown that methylmercury is toxic to various cells. Liu and colleagues now have added pancreatic beta cells to that list.

- "Altogether, our data clearly indicate that methylmercury-induced oxidative stress causes pancreatic beta-cell apoptosis (programmed cell death) and dysfunction," they said in a report scheduled for the Aug. 21 issue of the ACS journal, *Chemical Research in Toxicology*.

Liu added in an interview: "Although there was lack of a firm clinical basis, some cellular and animal studies implied that methylmercury may have [the] ability to injury the pancreatic beta cells. The present study supplied the direct evidence of basic research that methylmercury-induced oxidative stress causes pancreatic beta cell apoptosis and dysfunction. Further research is needed on whether methylmercury exposure increases the risk of diabetes in humans."







# Induced hyperglycemia protects rats against mercuric chloride nephrotoxicity\*\*\*\*

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Taiwan Yi Xue Hui Za Zhi. 1989 Apr;88(4):366-9.

Shyh TP, Shieh SD, Shieh SM.

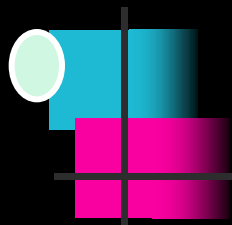
## **Abstract**

- Male Sprague-Dawley rats made diabetic (n = 20) by injection of streptozotocin 65 mg/kg and weight matched controls (n = 19) were divided into unilaterally nephrectomized and intact groups prior to challenge with HgCl<sub>2</sub> (3 mg/kg). Diabetic rats (D2, n = 9) did not show a rise in serum creatinine concentration (0.56 +/- 0.10 vs 0.48 +/- 0.10 mg/dl) after HgCl<sub>2</sub> challenge, while control rats (C2, n = 10) had a significant (p less than 0.001) rise in serum creatinine levels (0.40 +/- 0.14 vs 2.60 +/- 0.42 mg/dl). Uninephrectomized rats (D1, n = 11) did not alter the protection afforded by diabetes (creatinine 0.69 +/- 0.14 vs 0.67 +/- 0.13 mg/dl), but control uninephrectomized rats (C1, n = 9) had a substantial rise (p less than 0.001) in serum creatinine (0.51 +/- 0.13 vs 3.81 +/- 0.72 mg/dl). We conclude that induced hyperglycemia protects rats against mercuric chloride toxicity.

Induced Hyperglycemia Protects Against Mercury Nephrotoxicity\_\_\_\_ ASAIO Journal







# Cadmium and mercury-induced hyperglycemia in the fresh water crab,

*Oziotelphusa senex senex*: Involvement of neuroendocrine system

P. Sreenivasula Reddy<sup>a,\*,</sup>, P. Ramachandra Reddy<sup>b</sup> and S.B. Sainath<sup>a</sup>

<sup>a</sup> Department of Biotechnology, Sri Venkateswara University, Tirupati 517502, Andhra Pradesh, India

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Received 7 September 2009; revised 17 August 2010; accepted 24 October 2010. Available online 19 November 2010.

## Abstract

The effect of exposure to sub lethal concentrations of cadmium chloride and mercuric chloride on hemolymph glucose levels of the freshwater crab, *Oziotelphusa senex senex*, was studied. **Intact crabs exposed to cadmium or mercury exhibited a significant hyperglycemia compared to controls,** but no significant differences in hemolymph glucose level were detected among the eyestalkless crabs after exposure to metals, suggesting that the effect of metals could be on the sinus gland in the eyestalks, increasing secretion of the hyperglycemic hormone. To test this hypothesis, eyestalks were collected from control and metal exposed crabs, and tested for hyperglycemic effect and also for the hyperglycemic hormone levels. The levels of hyperglycemic hormone and the hyperglycemic effect were significantly low in the eyestalks collected from metal exposed crabs when compared with eyestalks from control crabs. These results strongly suggest that metals act, at least in part, by triggering the secretion of hyperglycemic hormone from the eyestalk.

Another Article in ScienceDirect - Ecotoxicology and Environmental Safety Cadmium and mercury-induced hyperglycemia in the fresh water crab, *Oziotelphusa senex senex* Involvement of neuroendocrine system



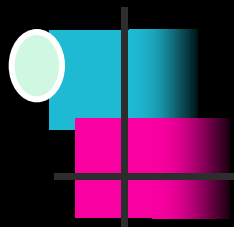


# Insulin Resistance:

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- State in which the body does not respond to the action of insulin hormone although enough insulin is produced.
- This occurs often in people with type 2 diabetes.





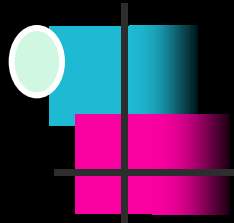
# Symptoms of Hyperglycemia

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## Symptoms:

- Thirst
  - Fatigue
  - Blurry vision
  - Rapid weight loss
  - Frequent trips to the bathroom
  - Nausea
  - Feeling faint
- 
- Having an infection or being sick or under stress can also make the blood sugar too high
  - If the patient is not sick and does not have ketones in their urine, going for a slow walk or some other easy exercise may lower the blood sugar.





# Symptoms of Hypoglycemia

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Caused by taking too much insulin, missing a meal, caffeine, soda, typical American diet, delaying a meal, exercising too much, or drinking too much alcohol. Sometimes medicines you take for other health problems can cause blood sugar to drop.

## Symptoms:

- Shakiness
- Unhappy
- Mixed up
- Hungry
- Fatigue
- Sweat a lot
- Headaches
- Very confused
- Sleepy
- Irritable
- May pass out or have a seizure.





August 2019





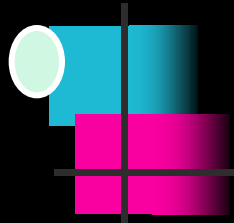


# Type 1 Diabetes

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- Occurs equally among males and females
- More common in whites than in nonwhites.



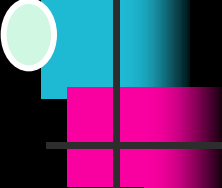


# Causes of Diabetes Type 1

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- Viruses
- Auto-immune disease
- Drugs: steroids, antibiotics etc.
- Vaccinations

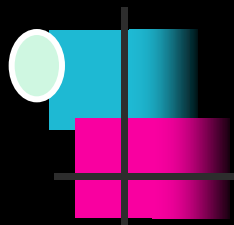




# Scientists discover new technology that can turn insects into delicious food-grade protein





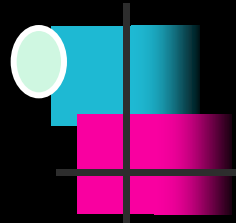


# Diabetes

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- An estimated 16 million people in the United States have diabetes mellitus
- About half of these people do not know they have diabetes and are not under care for the disorder.
- Each year, about 798,000 people are diagnosed with diabetes.
- 5th or 6th leading causes of death and disability in the United States...more than 193,140 deaths in 1996.
- One of the most common chronic disorders in children in the United States. About 123,000 children and teenagers age 19 and younger have diabetes.
- 24,000 persons with diabetes lose their sight each year. In the United States, diabetic retinopathy is the leading cause of blindness in adults under age 65.





# Diabetic Kidney Disease

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- The most common cause of kidney failure in the United States.
- The greatest threat to life in adults with Type 1 Diabetes.
- After having diabetes for 15 years, one-third of people with type 1 diabetes develop kidney disease.
- Diabetes damages the small blood vessels in the kidneys, impairing their ability to filter impurities from blood for excretion in the urine.
- Persons with kidney damage must have a kidney transplant or rely on dialysis to cleanse their blood.



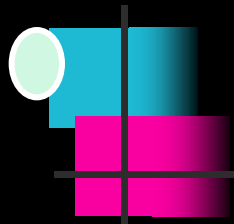


# Diabetic Neuropathy

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- Can cause pain and loss of feeling in the feet, legs, and fingertips.
- Can also affect the parts of the nervous system that control blood pressure, heart rate, digestion, and sexual function.
- Is a major contributing factor in foot and leg amputations among people with diabetes.





# Diabetes...Long-term Complications

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- Blindness
- Heart disease
- Strokes
- Kidney failure
- Amputations
- Nerve damage
- Uncontrolled diabetes can complicate pregnancy
- Birth defects are more common in babies born to women with diabetes.
- Don't forget about impotence





# Study Links Cancer & Diabetes

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- ASSOCIATED PRESS *DDN* 1-12-05
- CHICAGO—a study of more than 1 million South Koreans suggests diabetes can raise the risk of developing and dying from several types of cancer, including digestive-tract tumors.
- Diabetes is often linked to obesity and obesity is known to increase the risk of cancer. Yet few of the study participants were overweight, so the researchers think high blood sugar levels- another hallmark of diabetes- also might be involved.
- The highest risks for developing cancer and dying from it were found in people with the highest blood sugar levels, the South Korean researchers found. The study appeared in *Journal of the American Medical Association*.
- Researchers analyzed data on 1.29 million South Korean men and women ages 30-95. About 5 percent of the participants had diabetes. A total of 26,473 participants died of cancer during follow-up.
- **Participants with diabetes were roughly 30 percent more likely than those without to develop and die from cancer.**



# Reversing Diabetes

9-2024

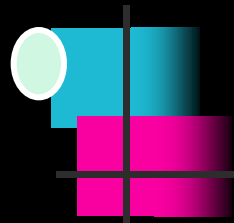
## A case study presented by Dr. Natalie Yahle

- A 55 year old male presents with concerns of the side effects from diabetic medications he was just prescribed due to his Hemoglobin A1C number going up. He admits that his diet is not the best. He ate out often and snacked a lot. He needed help with dietary recommendations and needed someone to hold him accountable. He also has concerns about his mild tremors, worsening of his handwriting, and family history of Parkinson's.
- In just two months: Lost 17 lbs; Hemoglobin A1C is down; Triglycerides lower to optimal levels; Liver enzymes improved; Aluminum levels drop in half!

Legend: <span>Warning</span> <span>High Risk</span> <span>Critical</span> <span>★ Optimal</span> <span>😊 Improvement</span> <span>😞 Worse</span> <span>⌀ No Improvement</span>							
Test Description	Current Rating 08/22/2024		Prior 06/03/2024	Delta	Healthy	Clinical	Units
Glucose	130.000	High	161.000	😊	79.600 - 89.400	70.000 - 99.000	mg/dL
Hemoglobin A1C (Gly-Hgh)	6.400	high	7.600	😊	4.800 - 5.605	4.500 - 6.405	%
Triglyceride	129.000	★	223.000	😊	50.000 - 150.000	0.000 - 200.000	mg/dL
SGOT (AST)	23.000	★	26.000		10.000 - 26.000	0.000 - 40.000	IU/L
SGPT (ALT)	36.000	high	45.000	😊	8.000 - 20.000	0.000 - 44.000	IU/L
Toxic Elements							
Aluminum	23.000	Very High	44.000	😊	0 - 5.200	5.210 - 12.000	ug/g

- The patient told me that “it was a tough adjustment and it took 4-6 weeks to break his bad habits”. He wasn’t eating breakfast before starting on his program and now he is eating every two hours. He avoids eating out completely and is now packing his own snacks and cooking at home.
- You don’t become diabetic over night and you don’t reverse diabetes overnight. It takes time and guidance from a nutrition specialist and proper testing to determine what each patient needs. The Aluminum level is important to note because any aluminum is too much. Aluminum toxicity is associated with Alzheimer's and Parkinson's disease, behavioral and learning disorders such as ADD, ADHD and autism. **It is never too late or too early to get tested! Whether it takes 2 weeks, 2 months, or 2 years, you can get started 2day!**





WHAT'S WRONG  
WITH HUGH?





## Oral Diabetes Agents Appear to:

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Oral diabetes agents are not insulin "pills" but powdered, compressed medications that appear to:

- Affect the insulin-making ability of the beta cells of the pancreas
- Stimulate the forming of receptor sites on the cells
- Correct some post-receptor defects on the insides of the cells
- Effect production of glucose by the liver (hepatic glucose production).







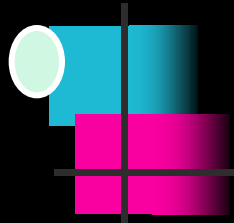
# Metformin (Glucophage)

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Increases the muscles' ability to use insulin, **decreases glucose production in the liver**, does not promote weight gain, **somewhat** reduces levels of triglycerides and other fats such as LDL or "bad" cholesterol in the blood, and may decrease the absorption of glucose from the intestine. **All these effects usually result in lower blood sugar.** Side effects may include loss of appetite, nausea, and diarrhea. Metformin is available in 500-mg and 850-mg tablets with a maximum dosage of 2,550-mg per day.

**Contraindications** for metformin include patients with Type 1 diabetes; **those at risk for cardiovascular disease; those with kidney or liver disease**; serum creatinine levels greater than 1.4 (for men) and 1.5 (for women); those who use alcohol excessively; and children and pregnant women. The use of metformin with any of these can result in serious and potentially fatal side effects such as lactic acidosis. It can be used with oral hypoglycemic agents, acarbose, troglitazone, or insulin.



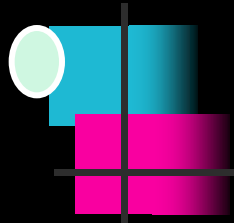


## Metformin (Glucophage) cont.

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- Works by suppressing the liver's glucose production and increasing the sensitivity of the cells to insulin.
- Risks: impaired liver and kidney function causing lactic acid buildup in the blood which can be fatal.
- ***This drug can increase your chances of dying from cardiovascular problems by two-and-a-half times.***



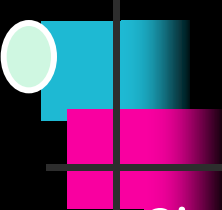


# Acarbose Drugs (Precose)

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- Function: **Slows carbohydrate digestion** in the small intestine **by blocking enzymes that naturally break down the carbohydrates**
- Risks: poor digestion, cramps, gas, diarrhea, linked to cancer of kidney in lab rats.



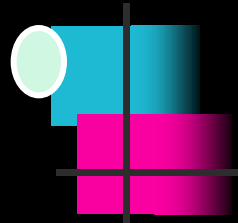


# Mounjaro for Type 2 Diabetes- FDA approved 2022 Drugs.com

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- Given by injection
  - Could cause low glucose, hypoglycemia and other symptoms.
- Not to mention this:
- In studies with rats, Mounjaro and medicines that work like Mounjaro **caused thyroid tumors, including thyroid cancer**. It is not known if Mounjaro will cause thyroid tumors, or a type of thyroid cancer called medullary thyroid carcinoma (MTC) in people.
- Mounjaro has been shown to decrease food intake and increase energy expenditure which results in weight loss.
- **It is not known if this medicine can be used in people who have had pancreatitis.**
- Mounjaro is not for use in people with type 1 diabetes.
- It is not known if this medicine is safe and effective for use in children under 18 years of age.





# point of view



This photo is real and was not edited. The stone is real, the trees are real, the soil is real and the sky is real.

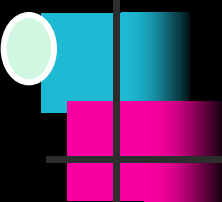
Now, the only thing you have to do is change your point of view. Look at the photo, upside down!



# point of view

This photo is real and was not edited. The stone is real, the trees are real, the soil is real and the sky is real. Now, the only thing you have to do is change your point of view. Look at the photo, upside down!





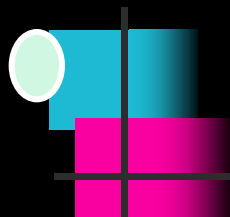
# Lantus (Insulin Glargine)

## 07-01-2009 MedWatch

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- Audience - Diabetes healthcare professionals, patients
- FDA notified healthcare professionals and patients that it is aware of four recently-published observational studies that looked at the use of Lantus (insulin glargine) and possible risk for cancer in patients with diabetes.
- Three of the four studies suggest an increased risk for cancer associated with use of Lantus.
- FDA is currently reviewing many sources of safety data for Lantus, including these newly published observational studies, data from all completed controlled clinical trials, and information about ongoing controlled clinical trials, to better understand the risk, if any, for cancer associated with use of Lantus. Discussions are also ongoing between FDA and the manufacturer of Lantus as to whether any additional studies evaluating the safety and efficacy of this drug will need to be performed. FDA will communicate the results on its ongoing review to the public, as appropriate, as our review continues.
- The FDA encourages both healthcare professionals and patients to report side effects from the use of insulin glargine to the FDA's MedWatch Adverse Event Reporting Program at [www.fda.gov/medwatch/report.htm](http://www.fda.gov/medwatch/report.htm).
- Read the complete MedWatch Safety summary, including a link to the Early Communication and supporting documents, at:
- <http://www.fda.gov/Safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm170089.htm>





# Higher Risk for Mortality with Intensive Diabetes Treatment

Online: Medscape Family Medicine 10-23-2008 Charles Vega MD

- Effects of Intensive Glucose Lowering in Type 2 Diabetes

- The Action to Control Cardiovascular Risk in Diabetes Study Group

Better glycemic control has been linked with better type 2 diabetes outcomes. Therefore, it would seem logical that a diabetes treatment strategy with a focus on lower glycated hemoglobin levels would improve patients' prognosis. However, results of the Action to Control Cardiovascular Risk in Diabetes (ACCORD) trial suggest otherwise, to the point that the trial was stopped prematurely.

- More recent research has questioned whether glycated hemoglobin levels may predict the risk for macrovascular disease at all. In another trial of intensive therapy for type 2 diabetes, multiple factors were demonstrated to promote a higher risk for macrovascular disease, including duration of diabetes, u hemoglobi demonstra

Intensively targeting blood sugar to near-normal levels in adults with type 2 diabetes at very high risk for heart attack and stroke...

- Intensive C Diabetes C adhesion n necrosis fa levels com

- Randomiza participant respectivel

- A safety co discontinu

- Given the p Metformin

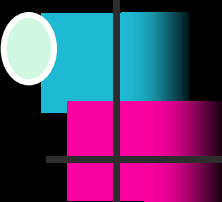
The most significant result of the ACCORD study, that intensive glycemic control was associated with a higher rate of overall mortality, is not intuitive, and the possible reasons behind this result are intriguing.

of the intensive treatment group and 58.3% of the standard treatment group. That the intensive treatment group experienced greater weight gain (a known side effect of treatment with thiazolidinediones) during the trial potentially highlights a discrepancy in between the 2 groups. However, it must be noted that participants in the intensive treatment group were also more likely to receive all classes of antidiabetes medications compared with the standard treatment group.

- One strength of the ACCORD trial is its real-world setting. The study had few exclusion criteria for participation and allowed multiple forms of diabetes treatment. However, clinicians should keep in mind that the glycemic control targets in the trial were lower than current recommendations from the American Diabetes Association, and the study focused on patients with significant cardiovascular risk factors in addition to diabetes.[10] There is strong evidence that glycemic control to less aggressive levels improves diabetes outcomes, and clinicians and patients should continue to try to achieve glycated hemoglobin levels of 7% or below. Meanwhile, continued follow-up of patients in the ACCORD trial, all of whom now receive standard therapy for diabetes, will help to determine which factors promoted the increased risk for death associated with intensive diabetes treatment.







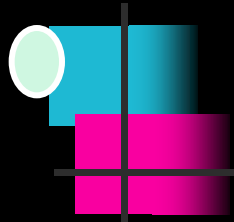
## Physicians Pay Attention: You Aren't Testing Your Patients Adequately for Kidney Disease!

Posted 03/17/2008 MedScape Herman Hurwitz, MD, FCAP\*\*\*\*\*

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- Chronic kidney disease, or CKD, is a life-threatening condition that **affects more than 1 in 9 adults in the United States**.<sup>[1]</sup> The consequences of inadequately treated CKD are cardiovascular disease and its comorbidities -- heart attack and stroke -- as well as renal failure. A recent *Quest Diagnostics Health Trends* Report suggests that patients most at risk for CKD -- specifically, those with diabetes or hypertension<sup>[2]</sup> -- are not being effectively monitored.
- Our analysis, developed in partnership with the National Kidney Foundation, found that a **stunning 60% of patients with diabetes and kidney disease did not receive a test for urine microalbumin during a 12-month period. 90% of patients who had hypertension and kidney disease also did not receive the test.**
- That's my opinion. I'm Dr. Herman Hurwitz, Senior Medical Director, Quest Diagnostics Mid Atlantic business unit-Philadelphia Campus.





# The Silent Kidney Disease Epidemic

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- More than 26 million Americans over age 20 suffer chronic kidney disease, which represents 13% of the adult population!<sup>22</sup>
- Diabetes and poorly controlled blood pressure are the leading causes of kidney failure, meaning this epidemic is largely preventable with early detection.<sup>28</sup>
- Annual blood chemistry tests and regular blood pressure checks can identify deteriorating kidney function early

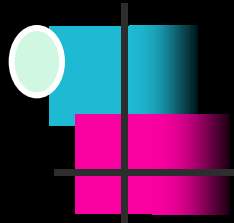




# The Silent Kidney Disease Epidemic

- End-stage renal disease is the name for kidney failure so advanced that it cannot be reversed. End-stage renal disease means that kidney function is so poor that the patient cannot be kept alive without aggressive and often only partially effective treatment.
- There are 336,000 Americans receiving chronic dialysis treatment right now.<sup>22</sup> Another 136,000 Americans are surviving with a kidney transplant.<sup>22</sup> These treatments can induce serious side effects that shorten the patient's life span. The annual cost of dialysis alone is about \$70,000, most of which is borne by Medicare (which is facing near-term insolvency).<sup>29</sup>



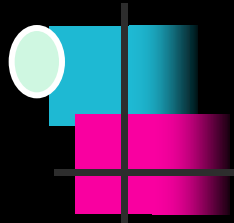


# The Silent Kidney Disease Epidemic

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- The National Kidney Foundation estimates that more than 67,000 Americans die of kidney failure each year,
- Kidney failure is so devastating to aging individuals because it causes startlingly high levels of homocysteine and C-reactive protein, greater incidences of anemia, and a host of other complications.



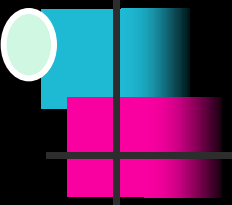


# The Silent Kidney Disease Epidemic and FDA banning Pyridoxamine B6

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- The FDA is seeking to ban pyridoxamine, which has been demonstrated to significantly delay **the progression of kidney disease.**<sup>11-13</sup>
- Pyridoxamine has been shown to slow the elevation of creatinine, a blood marker of kidney function by 68%.<sup>24</sup> These data indicate that many of those destined to perish from kidney disease will be dying prematurely because of the FDA's draconian actions to keep pyridoxamine away from the public.



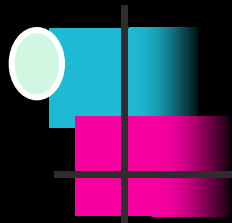


# Kidney Failure -17% function left

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- 6-2-2015 51y/o Male 5'9" 218 lbs
- Rapid kidney failure, fistula installed in preparation for imminent dialysis
- 6-23-2015 report from patient that kidney function is now 21%
- 4% improvement in just 3 weeks!!!



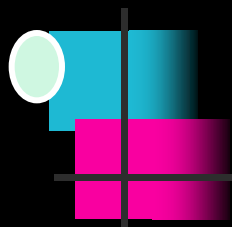


# Insulin Not Preventive

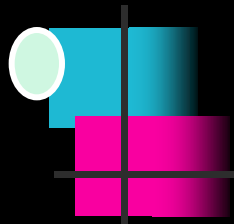
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- The Trial:
  - The new Diabetes Prevention Trial -- type 1 diabetes, sponsored by NIDDK, **identifies relatives at risk for developing type 1 diabetes and treats them with low doses of insulin or with oral insulin-like agents in the hope of preventing type 1 diabetes.** Similar research is carried out at other medical centers throughout the world.
- The Result:
  - The theory that small injections of insulin might help prevent the development of type-1 (juvenile onset) diabetes failed.
  - With or Without insulin, groups developed diabetes at similar rates. NEJM, May 30, 2002
  - **My questions: Did other problems develop due to the insulin? Was the severity or progression of diabetes different in these two groups?**
  - **RARELY DO WE GET THE WHOLE STORY.**







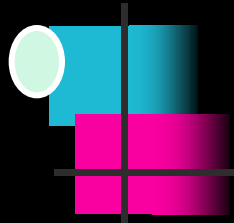


# Insulin Side Effects

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- Some adverse effects of insulin injections are a higher risk for hypoglycemia, significant weight gain leading to adverse effects on blood pressure and cholesterol levels, hypokalemia, lipodystrophy, hypersensitivity, and increased insulin antibody production.
- **Common side effects from insulin injections include allergic reaction such as itching or hives, acne, swelling in the face or hands, tingling or swelling in the throat or mouth, tightness in the chest, breathing trouble; seizures, fainting, and red, itchy, or swollen skin where the injection was given.**



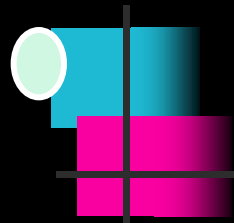


# Diabetes: Symptoms

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- NO SYMPTOMS in the early stages
- increased thirst
- increased urination
- change in urine
- fatigue
- vision problems: frequent prescription changes
- poor healing
- edema
- neuropathy





# Do you know your blood type?

---

I asked old Maude how she lost her husband.  
She told me her sad story.

"Well, Norman needed a blood transfusion, but his blood type was not on record, so the doctors asked me if I knew what it was?  
They urgently needed to know, in order to save my Norman's life.

"Tragically, I've never known his blood type, so I only had time to sit and say goodbye.

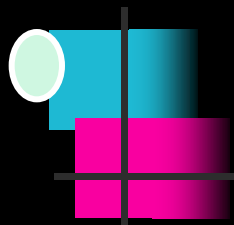
"I'll never forget how supportive my Norman was.

Even as he was fading away, he kept on whispering to me, "Be positive, be positive!

"That was my Norman!

Always thinking of others."





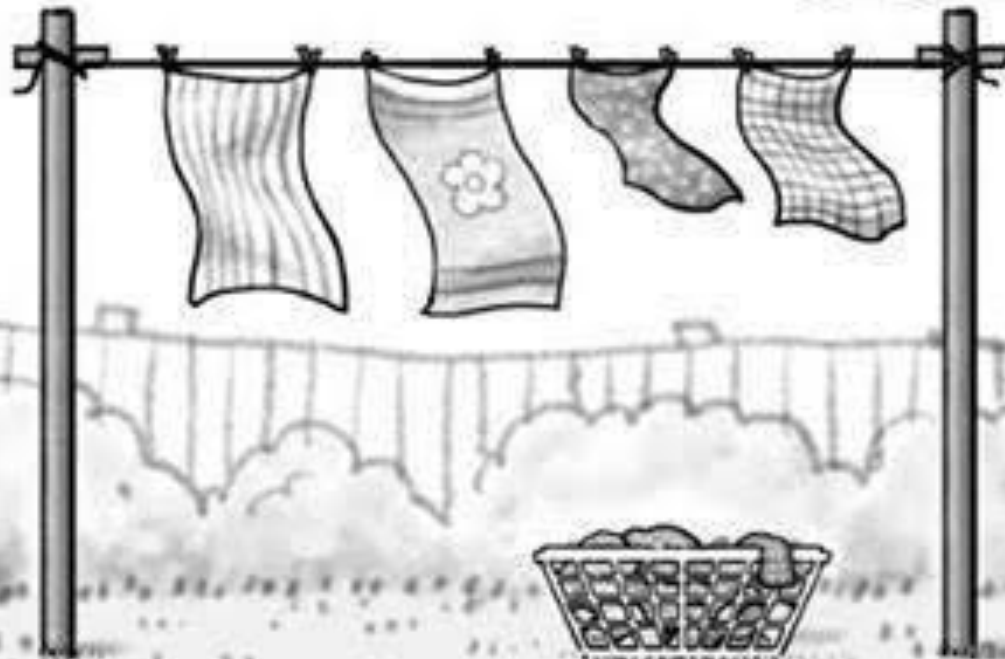
# DCBCN: [www.CBCN.us](http://www.CBCN.us)

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- **Board Certified is the highest degree that can be had for a doctor.**
  - **People look for Board certified neurologist, Board Certified Plastic Surgeon and Board Certified Chiropractic Clinical Nutritionist**
- **Masters degree is for teaching**
- **Ph.D is for research**
- **Current 300 hour Nutrition Diplomate Programs**
- **Texas Chiropractic College**
- **Each is a stand alone class on a specific topic and can be used as part of recertification hours for DCBCNs**

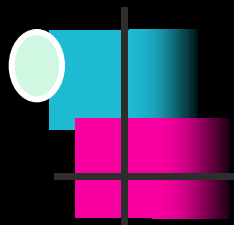


IT DRIES THE WASHING USING THE VERY  
LATEST TECHNOLOGY - A COMBINATION  
OF SOLAR AND WIND POWER



CHRIS  
MADDEN





# GLUCOSE AND HEMOGLOBIN A1C

READING BLOOD TESTS



# Focus on Elements: Glucose

**Clinical range:** 65-99mg/dL

**Healthy range:** 70-90mg/dL.

These values may be less for infants to 2 years of age.

**CRITICAL RANGE:** less than 40mg/dL and over 450mg/dL.

## DECREASED in:

- Hypoglycemia
- Hypothyroidism
- Early diabetes
- Neuroglycopenia (lack of glucose to brain)
- Insulinomas (pancreatic islet cell tumors)
- Pancreatitis
- Hepatitis
- Glucagon deficiency
- Liver disease
- Cancer
- Addison's disease (adrenal insufficiency)
- Hypopituitarism (deficiency of ACTH or growth hormone)
- Hypothalamic lesions
- Malabsorption
- Starvation/fasting
- Alcoholics
- Amino acid defects
- Fatty acid metabolism defects
- Carnitine deficiencies

## Drugs:

- Insulin
- Oral hypoglycemic drugs
- Alcohol
- Salicylates
- Quinine
- Haloperidol

## Nutrients to consider:

- Chromium Picolinate, Zinc, Vanadium (check hair level), Diabetic or Hypoglycemic diet

## INCREASED in:

- Poor carbohydrate metabolism
- Diabetes type I and II
- Nonfasting specimen
- Stress
- Myocardial infarct
- Brain damage
- CVA
- Convulsions
- Cushing's disease
- Acromegaly and gigantism (with insulin-resistant diabetes, Hypopituitarism later)
- Tumors
- Liver disease
- Pancreatitis
- Vitamin B1 deficiency
- Hypervitaminosis A

## Drugs:

- Alcohol
- Estrogens
- Corticosteroids
- Phenytoin
- Propranolol
- Thiazide
- Diuretics
- Corticoids
- Oral contraceptives
- Thyroid hormone
- Progestins
- Anti-inflammatory drugs (Indomethacin)
- Diuretic and Antihypertensive drugs (Thiazides, Furosemide, Clonidine)
- Neuroactive drugs (Phenothiazines, Tricyclics, Lithium carbonate, Haloperidol)

## INCREASED in continued:

- Adrenergic agonists (Isoniazid, Heparin, Cimetidine, Nicotinic acid)
- Many drugs

## Nutrients to consider:

- Chromium; Zinc; Vanadium (check hair level); Diabetic or hypoglycemic diet depending on level of glucose.



# Focus on Elements: Glycohemoglobin A1-C



A low value may precede diabetes due to hyperinsulinism.

**Clinical range** 3.4-6.7%

**Healthy range** 4.0-5.4%.

**CRITICAL VALUE:** over 10.1%.

The level of glycosylated hemoglobin correlates very well with a person's recent overall blood sugar levels. Hemoglobin A1c will tell what the diabetic's blood sugar levels have been running for the past 2-3 months.

## **DECREASED in:**

- Hemolytic anemias
- Congenital diseases
- Blood loss: acute or chronic
- Pregnancy
- Kidney disease with or without Hemodialysis

## **INCREASED in:**

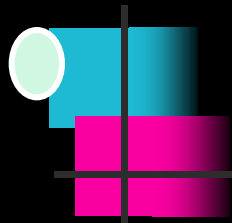
- Poor glucose control
- Retinopathy
- Diabetes mellitus
- Diabetic neuropathy
- Pregnancy
- Iron deficiency anemia
- Splenectomy
- Increased serum triglycerides
- Alcohol
- Albuminuria
- Hemochromatosis

## **Environmental:**

- Lead toxicity







# Vitamin D and Insulin Resistance

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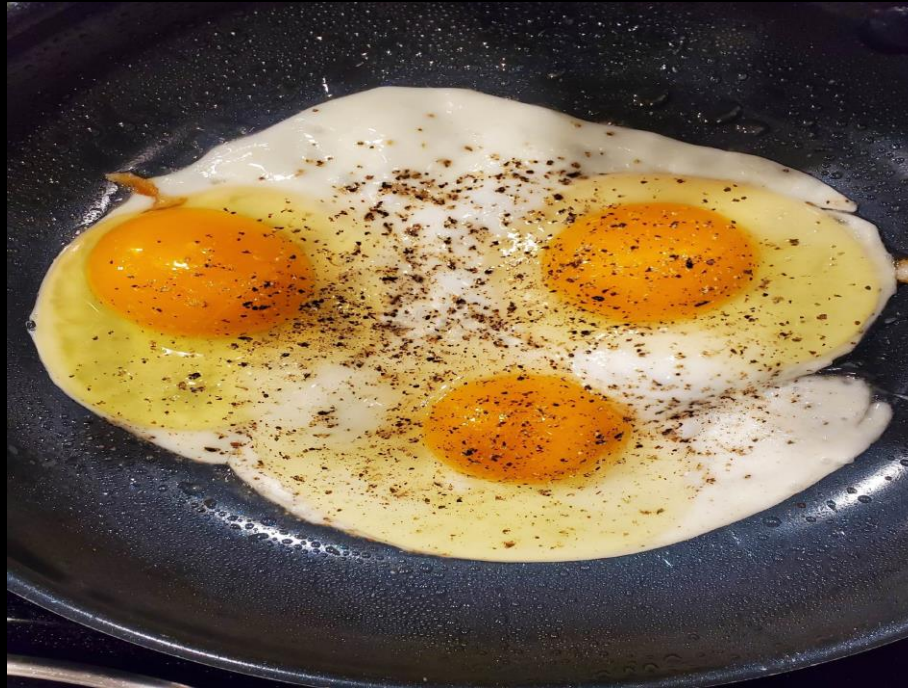
- American Journal of Clinical Nutrition, Vol. 79, No. 5, 820-825, May 2004  
© 2004 American Society for Clinical Nutrition  
ORIGINAL RESEARCH COMMUNICATION
- Hypovitaminosis D is associated with insulin resistance and  $\beta$  cell dysfunction<sup>1,2,3</sup>
- Conclusions: The data show a positive correlation of 25(OH)D concentration with insulin sensitivity and a negative effect of hypovitaminosis D on  $\beta$  cell function.
- **Subjects with hypovitaminosis D are at higher risk of insulin resistance and the metabolic syndrome.**

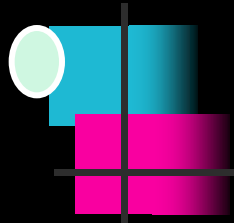




# My Breakfast:

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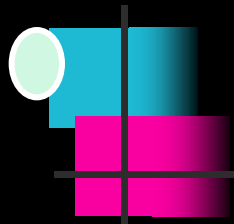


# Diabetic Dietary Considerations/ Low Carb Diets

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- No fruit juice.
- Eat only one fruit and at least 4 fresh vegetables per day.
- Eat snack every hour and half to 2 hours...eat by the clock.



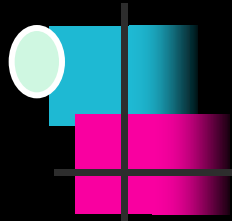


# Low Carb Guidelines

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- Initially, you will be on a protein/veggie diet. Avoid all breads, crackers, pasta, rice, and/or other grains even if they are whole grain, until further notice.
- When possible, use organic produce and meats. Most of the time, we can control our exposure to the pesticides on produce and the hormones in meats. It is better for your health if you can eliminate your exposure to these chemicals.





# Category 1 (Low Carb Guidelines)

---

**All Diabetics on Insulin or Oral Medication start with Category 1**

## **Most Desirable Protein Sources**

Almond Butter	Beef	Cashew Butter
Chicken	Eggs	Mackerel, fresh
Nuts (all)	Peanut Butter	Seeds (all)
Salmon, fresh	Tuna, fresh	Turkey

**Category 1 Hgb A1C >8 UA Glucose >500mg/dl**

**Category 1- Fruits: Fresh or Frozen. (Most Desirable Fruit with lowest carbohydrate content) Choose one per day. One cup equals one serving.**

Cantaloupe	Rhubarb	Strawberries	Watermelon
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# Category 1 Diet

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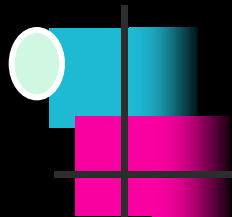
## Category 1 Vegetables: Fresh or Frozen

### Most Desirable Vegetables with lowest carbohydrate content

Asparagus*	Avocado	Bean sprouts
Beans, string	Beet greens	Broccoli
Brussels Sprouts	Cabbage*	Carrots
Cauliflower*	Celery	Chard, Swiss
Collards	Cucumber	Dandelion Greens
Eggplant	Endive	Kale
Kohlrabi	Leeks	Lettuce
Mushrooms	Mustard Greens	Okra
Onions	Parsley	Peppers, any
Pimento	Pumpkin	Radishes
Rutabagas	Sauerkraut*	Spinach
Squash	Tomatoes	Turnips
Water Cress		

\*Have these only once or twice per week if you have been directed to do so as a result of a low thyroid.





# Category 2 Diet

## Category 2 Hgb A1C 6-8 UA Glucose 50-500mg/dl

**Category 2- Vegetables: Fresh or Frozen (higher carbohydrate content) For a change, twice weekly, you can choose one vegetable from this list.**

Artichokes	Beans, dried	Beans, kidney
Beans, Lima	Corn	Hominy
Parsnips	Peas, green	Potato, sweet
Potato, white	Rice	Yams

**Category 2- Fruits: Fresh or Frozen (Less Desirable Fruit with higher carbohydrate content) As your glucose becomes more regulated, more choices may be made from this list when Dr. Merkle has given permission based upon test results.**

Apple	Apricots	Betty Lou Smackers	Blackberries	Cranberries
Currants	Grapes	Gooseberries	Grapefruit	Guava
Melons	Lemons	Limes	Oranges	Papayas
Peaches	Plums	Raspberries	Tangerines	





# Category 3 Diet

---

**Category 3 Hgb A1C <6 UA Glucose <50mg/dl**

**Category 3- Fruits: Fresh or Frozen (Least Desirable Fruit with highest carbohydrate content) Use these only when your glucose had normalized and Dr. Merkle has given permission to choose from this list based upon test results.**

Bananas	Blueberries	Cherries	Figs	Kumquats
Loganberries	Mangoes	Mulberries	Pears	Pineapple
Pomegranates	Prunes			

**Note: All vegetables should be eaten raw or lightly blanched or steamed (cook until color is vibrant). If you have digestive problems, it is advised that you always blanch or steam your vegetables before eating.**





	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8	Case 9
Glucose	low	VLOW	LOW						
Hg A1C	Op	Op	high						

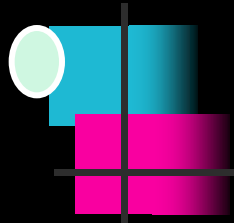
	Conditions	Considerations
Case 1	Hypoglycemia <b>Nutrients:</b> Chromium Picolinate	Liver
Case 2	Hyperinsulinsim / Danger <b>Nutrients:</b> Chromium Picolinate; Vanadium, EPA / DHA	Liver, Meds, Insulin, Glucophage, etc.
Case 3	Hyperinsulinism / Prediabetic <b>Nutrients:</b> Chromium Picolinate; Vanadium, EPA / DHA	Liver, Meds, Insulin, Glucophage, etc
Case 4		



	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8	Test 9
<b>Glucose</b>	low	VLOW	LOW	high	HIGH	high	LOW	VHigh	Op
<b>Hg A1C</b>	Op	Op	high	Op	Op	HIGH	HIGH	VHigh	HIGH

	Conditions	Considerations
<b>Case 6</b>	Diabetes <b>Nutrients:</b> Chromium Picolinate, Vanadium, EPA / DHA, Glucoril	Liver, Pancreas, Cholesterol
<b>Case 7</b>	Diabetes <b>Nutrients:</b> Chromium Picolinate, Vanadium, EPA / DHA, Glucoril	Probably on Meds, Poorly Controlled Diabetes
<b>Case 8</b>	Diabetes <b>Nutrients:</b> Chromium Picolinate, Vanadium, EPA / DHA, Glucoril, Niacinamide, Vit C, Vit E, Magnesium, Zinc	Liver, Pancreas, EVERYTHING
<b>Case 9</b>	Diabetes <b>Nutrients:</b> Chromium Picolinate, Vanadium, EPA / DHA, Glucoril	Liver

//////



# Diabetes: REVIEW

---

What is the primary regulator of glucose?

LIVER

When the primary regulator dysfunctions and the glucose goes high then low within a couple of hour, this is called:

HYPOGLYCEMIA

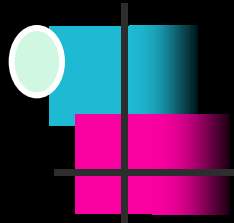
When the glucose goes too high in the blood, this gland is activated:

PANCREAS

This gland will produce what hormone when the glucose is too high:

INSULIN





# Diabetes: REVIEW

---

What forces glucose into the cells? Insulin

What allows glucose to enter the cells? Exercise/need

A dysfunctional liver, poor diet/ nutrition and excess insulin production causing the glucose to go very low is called this:

Hyperinsulinism

When the glucose is high and the cells no longer respond to insulin, this condition is now called: SYNDROME X

Why does SYNDROME X occur?

Where does all the glucose go when a person is on diabetic medication and insulin?

What are the long term effects of use of insulin?



September 2004 • Volume 38 • Number 9

## ADA's Proposed HbA<sub>1c</sub> Goals for Kids Draw Fire

Many Diabetologists say the new numbers are 'going to set families

up for failure.'

KEYSTONE, COLO. — Proposed new American Diabetes Association glycosylated hemoglobin goals for children have come under strong criticism from some prominent pediatric endocrinologists.

This is the first time that the ADA has set glycosylated hemoglobin treatment goals for children. And although the group's final report won't be finished until later this year, the proposed numbers the ADA is circulating for comment by diabetologists— **“an HbA<sub>1c</sub> level of less than 7.5% in 6- to 11-year-olds and less than 7.0% in 12- to 20-year-olds—are just too stringent,”** Dr. H. Peter Chase said at a conference on management of diabetes in youth.

**“This is coming at a time when less than a third of kids are making it below 8.0%. It's the feeling of many of us that this is just going to set families up for failure,”** said Dr. Chase, professor of pediatrics at the University of Colorado, Denver.

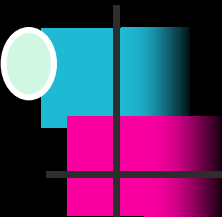
Dr. Chase noted that in three recent European series totaling close to 9,000 diabetic children as well as in a 300-patient series from Harvard's Joslin Diabetes Center in Boston, the mean HbA<sub>1c</sub> level was 8.6%-9.0%. Only 30%-32% of children in the four studies had an HbA<sub>1c</sub> level below 8.0%.

“Something to keep in mind: Once we have all these new guidelines, can you really implement them effectively in your patients, or are you just going to write them on a piece of paper with both patient and caregiver not paying much attention to them?” said Dr. Satish K. Garg, professor of medicine and pediatrics at the university.

Dr. Chase said he fully agrees with ADA officials on the need to reduce HbA<sub>1c</sub> levels in the pediatric diabetes population as a whole. **He has suggested a target of less than 8.0% as more realistic. It's achievable with the help of improved, next-generation continuous glucose monitoring systems, greater use of insulin pens and other convenience-enhancing devices, and the newer insulin analogs.**

**[What about dietary changes?]**





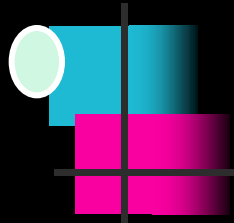
## Case: AM2655

### Type 1 Diabetic since 1996

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- Presented in September 2003.
- Very compliant and well controlled diabetic
- Primary concerns were allergies and diabetes.
- Other symptoms: excessive hunger, poor memory/concentration
- She was nursing her 3rd born child when she came into our office and wanted to make sure she was passing on good nutrition to her child while maintaining good nutrition for herself.
- She was taking insulin (Humalog) and also on an insulin pump.
  - The insulin seemed to be keeping the blood sugar levels under control.
- C-Peptide has been zero since 1996.





# C-Peptide...direct from Labcorp.com

## Reference Interval:

- 1.1-4.4 ng/mL (Note: Reference interval is for fasting patients.)

## Use:

- The principal use of C-peptide is in the evaluation of hypoglycemia. Patients with insulin-secreting neoplasms have high levels of both C-peptide and endogenous insulin; in contrast, patients with factitious hypoglycemia will have low C-peptide levels in the presence of elevated (exogenous) serum insulin. **C-peptide is also useful in evaluating residual beta-cell function in insulin-dependent diabetics**, many of whom have antibodies that interfere with insulin assays. Glucagon-stimulated C-peptide concentration has been shown to be a good discriminator between insulin-requiring and noninsulin-requiring diabetic patients. The diagnosis of islet cell tumor is supported by elevation of C-peptide when plasma glucose is low.

## Limitations:

- C-peptide levels are increased with renal failure. (C-peptide is normally excreted by the kidneys.) Instances of insulinoma have been described in which proinsulin was increased but insulin and C-peptide were not.



# 11y/o female with abdominal pains

Developing Type 1 diabetes, days from  
needing insulin.

Ticket: 58536

Complaints: XXXXX has been  
having on/off stomach pain for  
a week. Urgent care tested her  
for strep and she doesn't have  
it. Would any of these findings  
suggest bad enough infection  
like appendicitis?

After full testing" C-Peptide  
improved from 0.50 it 0.90 in 2  
weeks!!!

SBN member: *"She is feeling  
great!! Also, insulin antibodies  
were negative."*

	07/11/2019	06/25/2019		
Glucose	88.00	★	74.00	👍
Hemoglobin A1C (Gly-Hgh)			5.60	
BUN (Blood Urea Nitrogen)	12.00	★	16.00	👍
Creatinine	0.59	★	0.69	👍
BUN / Creatinine Ratio	20.00	high	23.00	👍
CRP C-Reactive Protein	1.00	★		
White Blood Count	4.60	low	8.20	👎
Red Blood Count	4.93	★	5.50	👍
Hemoglobin	14.10	★	16.00	👍
Hematocrit	43.60	high	48.30	👍
MCV	88.00	high	88.00	👍
MCH	28.60	★	29.10	
MCHC	32.30	low	33.10	👎
RDW	13.20	low	12.80	👍
Platelets	323.00	★	453.00	👍
Polys/Neutrophils (SEGS-PMNS)	51.00	★	66.00	👍
Lymphocytes	38.00	★	24.00	👍
Monocytes	7.00	★	7.00	
Eosinophils	3.00	★	2.00	
Basophils	1.00	★	1.00	
Neutrophils/Polys (Absolute)	2.30	low	5.40	👍
Lymphs (Absolute)	1.80	low	2.00	👎
Monocytes (Absolute)	0.30	★	0.60	
Eosinophils (Absolute)	0.20	★	0.10	
Basophils (Absolute)	0.00	★	0.10	
Granulocytes - Immature	0.00	★	0.00	
Granulocytes - Immature (Abs)	0.00	★	0.00	
C-Peptide, Serum	0.90	Low	0.50	👍
Carbon Dioxide (CO2)	21.00	★	23.00	
Insulin, Total (Fasting)	4.20	low	1.70	👍
Urine- Specific Gravity	1.03	high		
Urine- pH	6.00	★	6.00	

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The information in this report has not been evaluated by the FDA, and is not intended to treat, cure or prevent any disease.

Test Description	Current Rating 07/11/2019	Prior 06/25/2019	Delta	Healthy	Clinical
Urine- WBC Esterase	0.00	★	0.00	0.00 - 1.02	0.00 -
Urine- Protein	0.00	★	1.00	0.00 - 1.00	0.00 -
Urine- Glucose	0.00	★	0.00	0.00 - 100.00	0.00 -
Urine- Ketones	1.00	★	3.00	0.00 - 1.00	0.00 -
Urine- Occult Blood	0.00	★	0.00	0.00 - 1.02	0.00 -
Urine- Bilirubin	0.00	★	0.00	0.00 - 1.00	0.00 -
Urine- Urobilinogen, Semi-Qn	0.20	Low	0.20	0.30 - 0.70	0.20 -
Urine- Nitrite	0.00	★	0.00	0.00 - 1.02	0.00 -



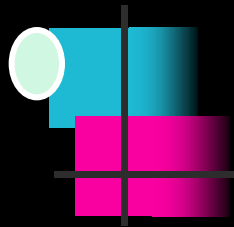


# C-Peptide vs. Insulin \*\*\*\*

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- **C-peptide** has **half-life** than of 30-35 minutes
- **Insulin** has a **half-life** of 5-10 minutes.





# Diabetic Keto Acidosis (DKA)

---

- Glucose is the body's first and normal source of energy and insulin is needed by the body to use glucose.
- If the body is not producing enough insulin or the body is resistant to insulin then fats are used by the body for energy.
- **Ketones are chemicals that the body creates when fat is broken down for energy.**
- Ketones are chemicals that the body creates when it breaks down fat to use for energy. The body does this when it doesn't have enough insulin to use glucose, the body's normal source of energy.
- When ketones build up in the blood, they make it more acidic. They are a warning sign that your diabetes is out of control or that you are getting sick.
- These ketones can be seen in the blood and also the urine.

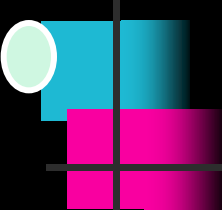




# Diabetic Keto Acidosis (DKA)

- **High levels of ketones can poison the body.** When levels get too high, you can develop DKA. DKA may happen to anyone with diabetes, though it is rare in people with type 2.
- DKA usually develops slowly. But when vomiting occurs, this life-threatening condition can develop in a few hours.
- **Early symptoms include the following:**
  - Thirst or a very dry mouth
  - Frequent urination
  - High blood glucose (blood sugar) levels
  - High levels of ketones in the urine
- **Then, other symptoms appear:**
  - Constantly feeling tired
  - Dry or flushed skin
  - Nausea, vomiting, or abdominal pain. Vomiting can be caused by many illnesses, not just ketoacidosis. If vomiting continues for more than two hours, contact your health care provider.
  - Difficulty breathing
  - Fruity odor on breath
  - A hard time paying attention, or confusion
- **Warning! DKA is dangerous and serious.**





# Subject Ketogenic Diet: \*\*\*\*\*

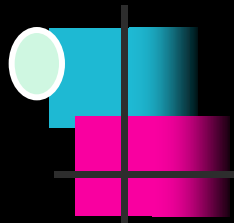
## Lesson learned today

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**Subject:** Lesson learned today

- After a lengthy conversation with an SBN member whos patient has a reoccurring cancer and claims to have been ketogenic for 2 years (even though she's 4'11" and 173lbs), I have come to remember that just because a patient says they are "keto", "vegan" or any other "healthy" diet, doesn't mean its truly healthy and whole foods. This doctor actually asked.... "Is there anything in this patient's supplements that would interfere with her going into mild ketosis?" My first thought was if the pt was truly in ketosis or truly following a real ketogenic diet, they shouldn't be so overweight.
- Come to find out....This patient had been consuming a lot keto friendly snacks. I haven't really looked at the labels on these products because I don't buy stuff like that. Come to find out they're loaded with sugar alcohol, preservatives, dairy content (most of the time powdered rancid junk), artificial colors, etc.
- I got a chuckle out of this "keto friendly" product.
- I've had this issue with "vegans" before. Someone can call themselves a Vegan yet still consume all kinds of artificial processed foods and refined products...but can still be "vegan". That's why you see Vegans walking around that are 50lbs overweight.
- Anyway...just my rant for the day!
- Yours in health,
- Tracey, MS



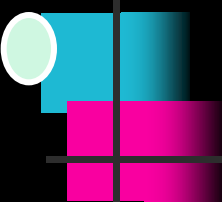


# Insulin Auto Antibodies

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- High Insulin Auto antibodies precede Type 1 diabetes, commonly referred to as insulin-dependent diabetes (IDDM)
- Insulin Auto antibodies cause pancreatic beta-cell destruction that leads to an absolute insulin deficiency.
- The clinical onset of diabetes does not occur until 80% to 90% of pancreatic beta cells have been destroyed.
- Prior to clinical onset, type 1 diabetes is often characterized by circulating autoantibodies against a variety of islet cell antigens, including glutamic acid decarboxylase (GAD), tyrosine phosphatase (IA<sub>2</sub>), and insulin.
- The autoimmune destruction of the insulin-producing pancreatic beta cells is thought to be the primary cause of type 1 diabetes.
- \$91.76 TEST NUMBER 141598 CPT CODE 86337





# IA<sub>2</sub> Antibodies (ICA512 Auto antibodies or Tyrosine Phosphatase Auto antibodies)

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- IA<sub>2</sub> Antibodies - The presence of these autoantibodies provides early evidence of autoimmune disease activity
- IA<sub>2</sub> Antibodies measurement can be useful in assisting the physician with the prediction, diagnosis, and management of patients with diabetes.
- Autoantibodies to IA<sub>2</sub>, a tyrosine phosphatase-like protein, are found in 50% to 75% of type 1 diabetics at and prior to disease onset.
- These autoantibodies are generally more prevalent in younger onset patients.
- The risk of diabetes is increased with the presence of each additional autoantibody.
- The positive predictive value of the IA<sub>2</sub> antibody test is enhanced when measured in conjunction with antibodies to GAD and insulin.
- \$140.00 TEST NUMBER 141531 CPT CODE 86341





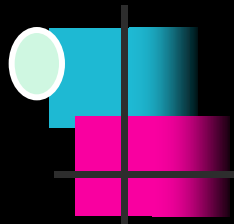
# GAD-65

## Glutamic acid decarboxylase (GAD<sub>65</sub>)

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- GAD-65 (Glutamic acid decarboxylase (GAD<sub>65</sub>)) is an enzyme that is produced primarily by pancreatic islet cells.
- A number of recent studies indicate that patients with Type 1 insulin-dependent diabetes mellitus (IDDM) often have antibodies to GAD<sub>65</sub>.
- The presence of GAD<sub>65</sub> autoantibodies has been shown to be a strong predictive marker for the eventual onset of IDDM.
- Measurement of GAD<sub>65</sub> antibody can also be of use in distinguishing insulin-dependent from noninsulin-dependent diabetics when the clinical history is ambiguous.
- GAD<sub>65</sub> autoantibodies are often markedly elevated in patients with the stiff-person syndrome (also referred to as stiff-man syndrome), a condition that is associated with fluctuating stiffness and paroxysmal spasms of the trunk and legs.
- \$178.50 TEST NUMBER 143008 CPT CODE 83519





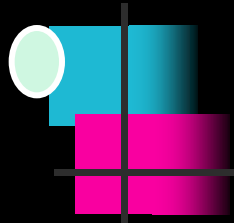
# Zinc Transport 8 (ZnT8) Antibody Test

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- The ZnT8 Antibodies attacks the islet cell of the pancreas, which is responsible for the production of insulin in the body.
- 70% of people that develop T1 diabetes will have positive ZnT8 Ab, GAD65 and IA-2 antibody tests.
- If injected insulin is not being used or is a recent development, it might be possible to maintain the islet cells and avoid or delay the need for insulin.
- The ZnT8 is used to support a diagnosis of type 1 diabetes, those with a high risk for developing Type 1 diabetes and those likely to need insulin therapy in the future.
- Low or optimal values are encouraged.
- Following a proper diet is crucial. Following the Category 1 diet is recommended.







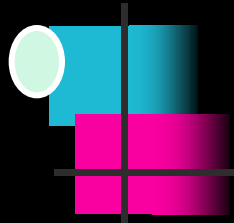
# Beta-hydroxybutyrate (BHB)-\*\*\*

a test to determine diabetic ketoacidosis

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- For those with type 1 diabetes, as well as type 2 diabetes, testing for this ketone is critical.
- Ketones are not harmful in small levels, however, high levels of beta-hydroxybutyrate can be dangerous. For those following the newest trend, the keto diet, certain levels of ketones are desirable (between 0.5-3 mmol/L). **However, for those with diabetes, these levels must be monitored as high levels could be deadly.**
- Diabetic Keto Acidosis (DKA) can occur with diabetes, high glucose, being sick, pregnant, infections or a variety of other conditions.
- **The urine dipstick does not measure beta-hydroxybutyrate, the most abundant of the physiological ketone bodies;**
- The dipstick reagent only reacts with ketones: acetoacetate and acetone. **This would indicate a need for a BHB blood test especially for children and adults with positive dipstick ketones.**
- Serum BHB increases in response to fasting, but should not exceed 0.4 mmol/L following an overnight fast (up to 12 hours).
- Twenty four-hour fasting tests should not be performed in patients <2 years of age.





# Beta-hydroxybutyrate (BHB)- a test to determine diabetic ketoacidosis

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- **It has been shown in humans that the serum glucose concentration does not correlate well with the blood ketone concentration.**

- The reason for this is that the rates of glucose and ketone production and utilization are not the same at different stages of the DKA. Therefore, severe ketosis can be missed if it is not investigated until severe hyperglycemia is also present.

- Shekih-Ali M, Karon BS, Basu A, et al. Can serum  $\beta$ -hydroxybutyrate be used to diagnose diabetic ketoacidosis. Diabetes Care. 2008;31:643–647. [[PubMed](#)] [[Google Scholar](#)]
- Van de Maele I, Rogier N, Damniet S. Retrospective study of owner's perception on home monitoring of blood glucose in diabetic dogs and cats. Can Vet J. 2005;46:718–723. [[PMC free article](#)] [[PubMed](#)] [[Google Scholar](#)]
- Tietz Textbook of Clinical Chemistry. Edited by CA Burtis, ER Ashwood. Philadelphia, WB Saunders Co. 1999
- Vassault A, Bonnefont JP, Specola N, et al: Lactate, pyruvate, and ketone bodies. In Techniques in Diagnostic Human Biochemical Genetics - A Laboratory Manual. Edited by F Hommes. New York, Wiley-Liss, 1991
- Bonnefont JP, Specola NB, Vassault A, et al: The fasting test in paediatrics: application to the diagnosis of pathological hypo- and hyperketotic states. Eur J Pediatr 1990;150:80-85





## Case: AM22655

### Test Results / Nutritional Recommendations

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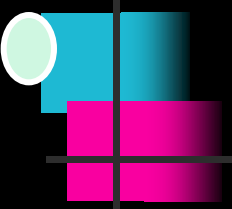
- Hypercholesterolemia: MLK (fish oils)
- Kidney involvement: Beta Carotene, Vit C
- Low Minerals: Calcium MCHC, Magnesium Glycinate, Spectramin Chelate
- Gastro/Intestinal dysfunction: Betaine HCL
- Low Functioning Thyroid: Energenics, Norwegian Kelp
- Anemia: Iron Peptonate, Sublingual B12
- Possible infection and/or inflammation: Vitamin C, Lauricidin



POTENTIALLY TOXIC ELEMENTS							
TOXIC ELEMENTS	RESULT μg/g	REFERENCE RANGE	PERCENTILE				
			68 <sup>th</sup>	95 <sup>th</sup>			
Aluminum	1.3	< 7.0					
Antimony	< 0.01	< 0.05					
Arsenic	0.035	< 0.06					
Beryllium	< 0.01	< 0.02					
Bismuth	0.015	< 0.1					
Cadmium	0.04	< 0.1					
Lead	0.31	< 1.0					
Mercury	0.26	< 1.1					
Platinum	< 0.003	< 0.005					
Thallium	< 0.001	< 0.01					
Thorium	< 0.001	< 0.005					
Uranium	0.065	< 0.06					
Nickel	0.16	< 0.4					
Silver	0.01	< 0.15					
Tin	0.18	< 0.3					
Titanium	0.61	< 1.0					
Total Toxic Representation							
ESSENTIAL AND OTHER ELEMENTS							
ELEMENTS	RESULT μg/g	REFERENCE RANGE	PERCENTILE				
			2.5 <sup>th</sup>	16 <sup>th</sup>	50 <sup>th</sup>	84 <sup>th</sup>	97.5 <sup>th</sup>
Calcium	819	300 - 1200					
Magnesium	140	35 - 120					
Sodium	630	12 - 90					
Potassium	17	8.0 - 38					
Copper	20	12 - 35					
Zinc	160	140 - 220					
Manganese	0.08	0.15 - 0.65					
Chromium	0.31	0.2 - 0.4					
Vanadium	0.008	0.018 - 0.065					
Molybdenum	0.077	0.028 - 0.056					
Boron	0.57	0.3 - 2.0					
Iodine	< 0.03	0.25 - 1.3					
Lithium	0.008	0.007 - 0.023					
Phosphorus	185	160 - 250					
Selenium	1.1	0.95 - 1.7					
Strontium	4.3	0.5 - 7.6					
Sulfur	49400	44500 - 52000					
Barium	1.7	0.26 - 3.0					
Cobalt	0.023	0.013 - 0.05					
Iron	8.0	5.4 - 14					
Germanium	0.073	0.045 - 0.065					
Rubidium	0.014	0.007 - 0.096					
Zirconium	0.19	0.02 - 0.42					
SPECIMEN DATA			RATIOS				
COMMENTS						EXPECTED	

# Case: AM22655 Blood Analysis Comparison Sept 2003 to Dec 2003

Test Description	Current Result Date: 12/01/2003	Current Rating	Prior Result 09/12/2003	Delta	Healthy	Clinical	Units
Glucose	100.00	Opt	90.00		84.10 - 100.01	65.00 - 109.00	mg/dL
Hemoglobin A1C (Gly-Hgh)	4.90	Opt	4.80		4.61 - 5.40	4.50 - 5.70	%
Uric Acid	5.30	Opt	4.80		4.10 - 6.00	2.40 - 8.20	mg/dL
BUN (Blood Urea Nitrogen)	24.00	hi	20.00	⊖	13.10 - 18.00	5.00 - 26.00	mg/dL
Creatinine	0.80	Opt	0.70		0.61 - 0.90	0.50 - 1.50	mg/dL
BUN / Creatinine Ratio	30.00	HI	28.00	⊖	13.10 - 20.00	8.00 - 27.00	ratio
Sodium	141.00	Opt	142.00		140.10 - 144.00	135.00 - 148.00	meq/dL
Potassium	4.20	Opt	4.60	⊕	3.91 - 4.60	3.50 - 5.50	meq/dL
Chloride	104.00	Opt	105.00		100.10 - 106.00	96.00 - 109.00	meq/dL
Magnesium	2.10	lo	2.20	⊖	2.21 - 2.50	1.60 - 2.60	mg/dL
Calcium	9.20	lo	9.10	⊕	9.71 - 10.10	8.50 - 10.60	mg/dL
Phosphorus	3.40	lo	3.70	⊖	3.41 - 4.00	2.50 - 4.50	mg/dL
Calcium/Albumin Ratio	2.00	LO	1.97	⊕	2.10 - 2.50	2.03 - 2.71	ratio
Total Protein	6.90	lo	6.80	⊕	7.11 - 7.61	6.00 - 8.50	gm/dL
Albumin	4.60	hi	4.60	⊖	4.10 - 4.51	3.50 - 5.50	gm/dL
Globulin	2.30	lo	2.20	⊕	2.81 - 3.51	1.50 - 4.50	gm/dL
A/G Ratio	2.00	hi	2.10	⊕	1.22 - 1.60	1.10 - 2.50	ratio
Total Bilirubin	0.40	Opt	0.40		0.39 - 0.93	0.10 - 1.20	mg/dL
Alkaline Phosphatase 25-150	104.00	Opt	109.00	⊕	66.00 - 108.00	25.00 - 150.00	IU/L
LDH	143.00	Opt	147.00		120.10 - 160.00	100.00 - 250.00	mu/mL
SGOT (AST)	25.00	Opt	22.00		18.10 - 26.00	6.00 - 40.00	mu/mL
SGPT (ALT)	25.00	Opt	19.00		18.10 - 26.00	6.00 - 40.00	mu/mL
GGT	9.00	lo	8.00	⊕	10.10 - 36.00	6.00 - 65.00	mu/mL
Serum Iron	102.00	Opt	74.00	⊕	85.10 - 120.00	35.00 - 155.00	mcg/dL
Ferritin	45.00	Opt	48.00		30.10 - 218.30	22.00 - 322.00	ng/mL
Cholesterol	214.00	HI	204.00	⊖	150.10 - 180.00	100.00 - 199.00	mg/dL
Triglyceride	51.00	lo	50.00	⊕	80.10 - 115.00	10.00 - 199.00	mg/dL
HDL Cholesterol	105.00	Opt	100.00		55.10 - 120.00	40.00 - 150.00	mg/dL
LDL Cholesterol	98.00	hi	94.00	⊖	50.10 - 75.10	6.00 - 99.10	mg/dL
VLDL Cholesterol	10.00	Opt	10.00		5.10 - 20.10	4.10 - 40.10	mg/dL
Total Cholesterol / HDL Ratio	2.00	Opt	2.00		0.00 - 4.00	0.00 - 5.00	ratio
T4 Thyroxine	6.10	lo	5.70	⊕	7.10 - 9.00	4.50 - 12.00	mcg/dL
T3 Uptake	32.00	Opt	32.00	⊖	29.10 - 35.10	24.00 - 39.00	%
T7 Free Thyroxine Index	1.90	lo	1.80	⊕	2.61 - 3.60	1.20 - 4.90	
White Blood Count	4.90	lo	5.10	⊖	5.10 - 8.00	4.00 - 10.50	k/cumm
Red Blood Count	5.25	Opt	5.00		4.51 - 5.50	3.80 - 5.60	m/cumm
Hemoglobin	15.60	hi	14.80	⊖	13.91 - 15.00	11.50 - 17.00	gm/dL
Hematocrit	47.40	hi	44.10	⊖	39.51 - 47.00	34.00 - 50.00	%
MCV	90.00	Opt	88.00		85.10 - 97.00	80.00 - 98.00	cu.m
MCH	29.70	Opt	29.60		28.10 - 32.00	27.00 - 34.00	pg
MCHC	32.80	lo	33.60	⊖	33.10 - 34.99	32.00 - 36.00	%
Platelets	173.00	lo	168.00	⊕	175.10 - 250.00	140.00 - 415.00	k/cumm
Polys (SEGS-PMNS)	65.00	hi	67.00	⊕	55.10 - 65.00	40.00 - 74.00	%
Lymphocytes	28.00	Opt	25.00	⊕	25.10 - 40.00	14.00 - 46.00	%
Monocytes	5.00	lo	5.00	⊖	5.10 - 7.10	4.90 - 13.00	%
Eosinophils	2.00	Opt	2.00		0.00 - 4.00	0.00 - 7.00	%
Basophils	0.00	Opt	1.00	⊕	0.00 - 0.00	0.00 - 3.00	%
ESR (Erythrocyte Sed Rate)	2.00	Opt	2.00		0.00 - 8.00	0.00 - 30.00	mm/HR
CRP C-Reactive Protein	1.90	hi	1.70	⊖	0.00 - 0.00	0.00 - 4.90	mg/L
Creatine Kinase	99.00	Opt	78.00		50.50 - 150.00	24.00 - 204.00	u/l



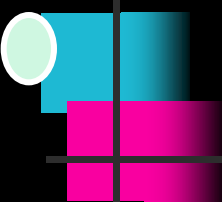
## Case: AM22655

### Type 1 Diabetic since 1996

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- Within two months she had decreased her insulin by 1/10 to 1/8.
- 2-23-2004 Overall 25% less insulin
- 2-27-2004- now at the lowest level she had been at for several years and it appears that the trend is decreasing
- 3-4-2005 email... “This value is the lowest I've had in all of the past 4 years. **If the trend continues, I will reach a zero insulin value in about 2 years.** Wishful Thinking!”





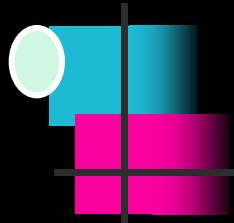
## Case: AM22655

### Jelly Bean-like Bumps

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4-29-2004 “Dr. Merkle: Another interesting development is that I have had jelly bean-like bumps under the skin of my underarm for years that have been swollen. Every doctor that I have ever asked just said it was a plugged duct and I should change my deodorant. I tried many different things but nothing worked. So for the last 2-3 years I've given up and kept everything the same.”





## Case: AM22655

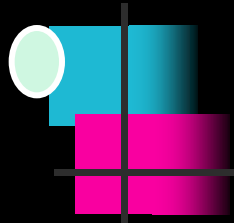
### Jelly Bean-like Bumps

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- “A couple weeks ago I noticed that they are completely gone (unswollen). In my curiosity, I looked into what this swollen thing was and found that there are lymph nodes corresponding to my previous bumps. **In my reading I have notice that fibrous breast tissue has been treated with iodine with a high success rate. Lymph nodes are also present in the breast so are these connected? Also, the lymph system is the one that goes out of whack and makes the antibodies that destroyed my pancreas cells. Coincidence?**”
- “Have you seen any info on studies of iodine supplementation and the immune system?”







## Case: AM22655

### Thyroid and Grave's disease

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- The TSH was 10, which was done in April of 2004 by her endocrinologist. He diagnosed Graves disease. I recommended she take Iodine and for her to read: *The Safe and Effective Implementation of Orthoiodo supplementation In Medical Practice* by Guy E. Abraham MD, a former Professor of obstetrics, Gynecology and Endocrinology at the UCLA School of Medicine”
- This and other articles concerning thyroid and iodine are found at [www.Optimox.com](http://www.Optimox.com)





# Thyroid Improvement

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----- Original Message -----

From: AM22655; To: Van Merkle Sent: Wednesday, June 02, 2004 4:09 PM

Subject: Change in Thyroid Test Results

Hello-

I just had an appointment with my Endocrinologist and got my lab results from last week (5/26/04).

They are the following:

Hemoglobin A1C 6.0 Ref. 4.4-6.1

T4free 1.01 Ref 0.80-1.80

TSH 2.88 Ref 0.4-5.5

T3free 190 Ref 230-420

So by the looks of it, I'm approaching hypothyroid again. **He has completely ruled out Grave's disease.**

Enjoy the day! 6-2-2004

Dear AM22655,

Glad to hear about the Grave's disease, you are doing well.

Exercise is my choice for maintaining the thyroid level and improving the immune system.

I think you are doing quite well. Dr. Merkle





## Case: AM22655

# I think I'll be off insulin very soon....

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- “I put a call into my endocrinologist so that he's aware of the situation. I'm also hoping to get another C Peptide test done to see if there is any changes. I am noticing a difference in my low blood sugar readings where I haven't gone below 64 in the past couple of days. It appears that my body is responding to the low and dumping glucose into my system because I have seen a rise in glucose after getting into the mid 60's. So I started reducing my insulin when ever I get to the 60's and found that most of the time it doesn't make much of a difference.
- So if I stay on this course, I'll be off insulin in a few days. :) Enjoy the day!! AM22655”



# Personal Vitamin and Supplement Program For:

2 Month  
Supply

Thursday, December 04, 2003

Vitamin or Supplement	Dosage Per Day	AM	NOON	PM	BED	Bottles	Quantity	Price	Extended Price
1 Beta Carotene ( A – Caro Key Company)	25000 I.U.	1				1	250 @	\$18.20	\$18.20
2 Betaine HCL (Douglas Labs)	1950 mg.	1	1	1		2	100 @	\$11.60	\$23.20
3 Calcium MCHC (Douglas Labs)	500 mg.	1		1		1	250 @	\$27.55	\$27.55
4 Chlorella Plus (Douglas Labs)	1000 mg.	1		1		2	90 @	\$13.20	\$26.40
5 Energenics (Metagenics)	2	1		1		1	270 @	\$31.40	\$31.40
6 Exstress Super (Key Company)	50 mg.	1				1	100 @	\$10.75	\$10.75
7 Iron Peptonate (Ferrotate) ( Key Company)	25 mg	IRON - Take 1 every other day				1	100 @	\$12.40	\$12.40
9 Magnesium Glycinate (Douglas Labs)	200 mg.	1		1		1	240 @	\$28.15	\$28.15
10 Manganese (Douglas Labs)	50 mg.	1				1	90 @	\$6.25	\$6.25
11 MLK 1000 (Key Company)	1000 mg.				2	1	100 @	\$11.60	\$11.60
12 Norwegian Kelp (Key Company)	1000 mg.	2		2		2	100 @	\$9.90	\$19.80
13 Spectramin Chelate (Douglas Labs)	900 mg.	1		1		2	90 @	\$17.30	\$34.60
14 Sublingual B12 Plus (B12/Folic) (Douglas Labs)	1	1				1	90 @	\$8.30	\$8.30
15 Ultra Preventive III (Multiple) (Douglas Labs)	2	1		1		1	180 @	\$22.05	\$22.05
16 Vanadium 250 (Douglas Labs)	250 mcg.	1				1	60 @	\$9.75	\$9.75
17 Vitamin C (Douglas Labs)	2000 mg.	1		1		1	250 @	\$19.40	\$19.40
18 Lauricidin ( Med-Chem Labs)		Take ¼ Teaspoon 3 times a day				1	72 @	\$32.50	\$32.50

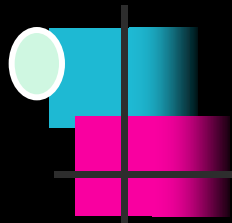
**Supplements Must Be Paid In Full Upon Receipt**

**Take All Supplements With Meals Unless Otherwise Noted**

## Speciality / Instructions

SUBLINGUAL B12 - Be sure to chew this supplement up and hold under the tongue for better absorption.

<b>Sub Total</b>	\$348.15
<b>Tax</b>	\$26.11
<b>Total</b>	\$374.26



## AM update: 7-2021 cont. ★★★★★

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- I've made some more interesting connects lately. So remember when my phosphorus dropped in my blood? That was about the time my thyroid had recovered from the amalgam recycling out of the bone. At that point, I started getting more inflammation coming from my stored adipose tissue in the outer thigh. This deposit was there when I was in high school. It was small and very dense as I read amalgams can cause. Anyway, back in high school I had a dimple on my thigh that no matter what I did it was always there. No amount of exercise (cheerleading for 4 years, college marching band for 5 years, or even when I was starving to death when I was coming down with T1D and lost over 10 pounds that summer and I was already really skinny prior to that) got that dimple to go away.





## AM update: 7-2021 cont. ★★★★★

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- The reason why this is important is that even though I've been eating organic foods for about 20 years now, I sprayed glyphosate as a kid with no protective apparel. I sprayed it from a wand while wearing shorts on a bean bar all day. I tried to avoid breathing the stuff but every once in a while the wind would kick up and blow the spray back up at us. Also, I remember the tracer dye drops on my legs. Not many but a few. We used a purple or pink dye in order to see where the spray had gone.
- There is a new book out about glyphosate by Stephanie Seneff. I'm in the process of reading it and it clicked that I most likely stored glyphosate in my adipose tissue back then. So I messaged her and asked if glyphosate leaves through the hair and she said that another researcher found that it leaves in the hair and nails. So if you look at my hair tests when my phosphorus got low in my blood, my hair tests are high in phosphorus. So my next question is, does the hair test measure the phosphorus in glyphosate if it is coming out of me in the hair?////

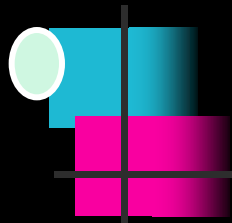


## AM update: 7-2021 cont. ★★★★★

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- So, the next thing this leads me to is that starvation leads to a messed up phosphorus metabolism so the research says. Do you remember back when I couldn't take calcium because it stopped my intestines? Well, another tidbit is that to keep my system moving I had to take magnesium. In fact, I had to take more magnesium every time my phosphorus level dropped in my blood. I just read that magnesium causes the kidneys to recycle back in more phosphorus. So the magnesium is keep me from totally crashing my phosphorus level.





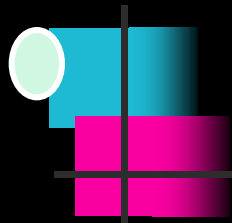
## AM update: 7-2021 cont. ★★★★★

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- That said, I need more phosphorus. There have been times that my blood sugars unexpectedly drop at night so I like to keep my glucose from being too close to low so that I don't have issues at night. That said, having your glucose elevated at all causes more phosphorus depletion. So, do you remember when I was all happy when I found that phosphorus supplement back in 2008 that reduced my daily insulin requirements gradually every day? It was a very gradual decrease that was consistent. I tried to get more of the stuff but it was discontinued and I could not find another bottle anywhere. I so want to try that again. I took something call 'lysinated phosphorus' that was made by Swanson supplements (if you do a google of it, there is a page about it at iherb). This supplement bonded lysine with phosphorus and it really worked for me the whole brief time I was able to take it. Lysine is known to really help bring minerals across the gut barrier.





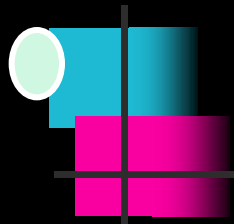


## AM update: 7-2021 cont. ★★★★★

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- Is there any way to get this supplement? I really think that it is key for me. I need the energy back in my life and an increase in ATP production would do a lot for my system including detoxing and glucose regulation. I know you have made your own supplements, or maybe you know someone at this Swanson company that could make a small batch? If this is what I am missing, then how do I get it? Any ideas?
- Anyway, I hope all is well in Ohio... Thanks! Anne Meyer
- PS. One side question, is it possible to get Ivermectin through Take 2? Terry's got to be on campus this fall and so does our third, Amelia, who just graduated high school. I'm not sure how to get ahold of this stuff.





## AM update: 7-2021 cont. ★★★★★

---

- And also another thing to think about from what I have read is that calcitriol causes calcium deposition when phosphorus is low. Biophosphinates prevent calcium deposition so maybe they would help with the calcium deposits I have... Also, this could explain why my thyroid woke up in my January 2009 testing. They thyroid also contains phosphrus that I have read. And since I had just taken phosphorus in mid 2008 and then I uped my vitamin D, did that cause my system to get revved up? I'd expect a longer reaction time when dealing with thyroid hormones... Anne





# Case: AM22655 Results

---

Prior to treatment **(9-2003)**:

- Daily average insulin usage **24 units/day**

Current level with **6 months following Dr. Merkle's advise:**

- Daily average insulin usage **12 units/day**
- As of April 2006, she is at 11-12 units/day
- Complicating factors: Nursing, thyroid problems, toxic elements (uranium), low minerals (iodine, vanadium, manganese), chronic infection
- **Glyphosate**





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**Cutting Edge Laser Technologies**, the world leader in light-based technologies for medical professionals, offers a full line of patented and clinically validated therapy lasers for the progressive practitioner. MLS® (Multi-Wave Locked System) Laser Therapy – a patented technology exclusive to Cutting Edge – is quickly becoming the standard of care for alleviating pain, reducing inflammation, and precipitating recovery.



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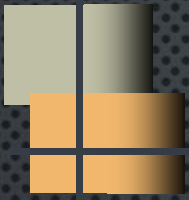
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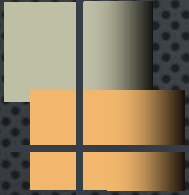


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# HEART DISEASE

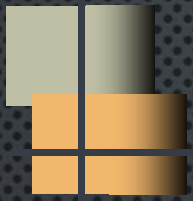


## 9 IN 10 WILL DEVELOP HYPERTENSION

- THE LIFETIME RISK FOR THE DEVELOPMENT OF HIGH BP IS 90%
- 60% WILL RECEIVE MEDICATION
- “THIS PUBLIC HEALTH BURDEN WILL LIKELY INCREASE AS THE US POPULATION AGES IN THE NEAR FUTURE.
- HYPERTENSION: GREATER THAN 140/90  
2002:287(8).

JAMA



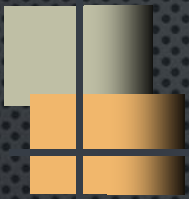


# FIRST SIGN OF HEART DISEASE...SUDDEN DEATH.

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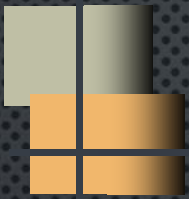
- THE VAST MAJORITY OF DIABETIC PATIENTS DEVELOP HEART DISEASE, AND **80% OF THEM DIE OF HEART DISEASE. BUT 1/3 OF PEOPLE WHO HAVE DIABETES DON'T KNOW IT.**
- *DDN 2-2002*: RECOMMENDED THAT PEOPLE GET MORE FREQUENT URINALYSIS TO DETECT KIDNEY DISEASE AND DIABETES.





## NEW CHOLESTEROL STANDARDS

- WILL TRIPLE THE NUMBER OF PEOPLE TAKING CHOLESTEROL DRUGS FROM 13.5 MILLION TO 36 MILLION PEOPLE.
- AMERICANS NEEDING TO MAKE LIFESTYLE CHANGES WILL NOW NUMBER 65 MILLION, UP FROM 52 MILLION.
- *READER'S DIGEST* AUGUST 2002

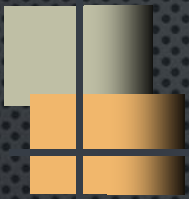


# STATINS IN AMERICA

ONE IN FOUR AMERICANS OVER THE AGE OF 45 TAKE A STATIN

- ADVERSE EFFECTS:
  - MUSCLE PROBLEMS
  - NERVE DAMAGE IN HANDS AND FEET
  - IMMUNE DEPRESSION
  - PANCREAS AND LIVER DYSFUNCTION
  - SEXUAL DYSFUNCTION
  - CATARACTS
  - MEMORY LOSS
  - INCREASED RISK OF CANCER





# STATIN DRUGS LEAD TO DIABETES

- RESEARCHERS LOOKED AT FIVE DIFFERENT CLINICAL TRIALS THAT TOGETHER EXAMINED MORE THAN 32,000 PEOPLE. THEY FOUND THAT THE HIGHER THE DOSAGE OF STATIN DRUGS BEING TAKEN, THE GREATER THE DIABETES RISK.
- "IN A POOLED ANALYSIS OF DATA FROM 5 STATIN TRIALS, INTENSIVE-DOSE STATIN THERAPY WAS ASSOCIATED WITH AN INCREASED RISK OF NEW-ONSET DIABETES COMPARED WITH MODERATE-DOSE STATIN THERAPY."
- JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION JUNE 22, 2011; 305(24): 2556-2564



## STATIN DRUGS ACCELERATE CARDIOVASCULAR DISEASE: CORONARY CALCIFICATION BY MORE THAN 50 PERCENT

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One in four Americans over the age of 45 take a statin

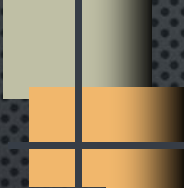
Adverse effects of statin drugs include muscle problems, nerve damage in hands and feet, immune depression, pancreas and liver dysfunction, sexual dysfunction, cataracts, memory loss, and an increased risk of cancer

A new study shows that statin use is associated with a 52 percent increased prevalence and extent of calcified coronary plaque compared to non-users. *Atherosclerosis*  
*August 24, 2012*

The authors concluded that:

*"More frequent statin use is associated with accelerated coronary artery calcification in T2DM patients with advanced atherosclerosis."*





# STATINS INHIBIT VITAMIN K2 AND STIMULATE HARDENING OF THE ARTERIES

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- OSLO, NORWAY AND METUCHEN, NJ – (MAY 19, 2015) A NEW PAPER PUBLISHED IN THE MARCH ISSUE OF **EXPERT REVIEW CLINICAL PHARMACOLOGY** STATES THAT STATINS MAY ACT AS “MITOCHONDRIAL TOXINS” WITH NEGATIVE EFFECTS ON THE HEART AND BLOOD VESSELS NOT ONLY VIA THE DEPLETION OF COENZYME Q10 (CoQ10), BUT ALSO BY INHIBITING “THE SYNTHESIS OF VITAMIN K2, THE COFACTOR FOR MATRIX GLA-PROTEIN ACTIVATION, WHICH IN TURN PROTECTS ARTERIES FROM CALCIFICATION.”
- VITAMIN K2 PLAYS A CRITICAL ROLE IN THE ACTIVATION OF MATRIX GLA PROTEIN (MGP), WHICH INHIBITS SOFT TISSUE AND CARDIOVASCULAR CALCIFICATION. MGP IS PRESENT IN BONE, BLOOD VESSEL, LUNG, HEART, AND KIDNEY SOFT TISSUES. MGP BINDS CALCIUM AND PROTECTS BLOOD VESSELS FROM CALCIFICATION, BUT ONLY WHEN IN ITS ACTIVE FORM, WHICH REQUIRES ADEQUATE INTAKES OF VITAMIN K2. **UNFORTUNATELY, STATINS INHIBIT VITAMIN K2 SYNTHESIS IN THE BODY, THEREBY ACCELERATING CORONARY ARTERY CALCIFICATION, AN IMPORTANT MARKER OF THE PROGRESS OF ATHEROSCLEROSIS, ACCORDING TO RESEARCHERS.**
- “THIS NEW PAPER SPEAKS DIRECTLY TO STATINS INTERRUPTING THE MECHANISM OF ACTION BY WHICH VITAMIN K2 INHIBITS CALCIFICATION,” SAID HOGNE VIK, NATTOPHARMA CEO. “CONVERSELY, RESEARCH CLEARLY DEMONSTRATES THAT INCREASING DIETARY VITAMIN K2, SPECIFICALLY VITAMIN K2 AS MENAQUINONE-7, CAN IMPROVE VITAMIN K2 LEVELS IN THE BLOOD AND TISSUES, THUS PROMOTING CARDIOVASCULAR HEALTH.”
- SUPPORTING VIK’S STATEMENT, A NEW STUDY, “MENAQUINONE-7 SUPPLEMENTATION IMPROVES ARTERIAL STIFFNESS IN HEALTHY POSTMENOPAUSAL WOMEN,” PUBLISHED IN THE JOURNAL THROMBOSIS AND HAEMOSTASIS, DEMONSTRATED THE POSITIVE IMPACT OF MENAQ7® BRAND VITAMIN K2 AS MK-7 (MENAQUINONE-7) ON CARDIOVASCULAR HEALTH THROUGH ITS IMPROVEMENT OF ARTERIAL FLEXIBILITY. THIS STUDY IS SIGNIFICANT BECAUSE IT IS AN INTERVENTIONAL STUDY WITH A VITAMIN K2 DIETARY SUPPLEMENT, MENAQ7, CONFIRMING WHAT PREVIOUS POPULATION-BASED STUDIES HAVE SHOWN: A POSITIVE CORRELATION OF VITAMIN K2 CONSUMPTION FROM DIETARY SOURCES ATTRIBUTES TO LESS ARTERIAL CALCIFICATION AND REDUCED RISK OF CORONARY HEART DISEASE.
- RESEARCHERS AT THE R&D GROUP VITAK OF MAASTRICHT UNIVERSITY IN THE NETHERLANDS MONITORED 244 HEALTHY POST-MENOPAUSAL WOMEN FOR THREE YEARS USING PULSE WAVE VELOCITY AND ULTRASOUND TECHNIQUES. THE PARTICIPANTS, AGED 55-65 YEARS, WERE RANDOMLY ASSIGNED TO TAKE 180 MCG OF MENAQ7 DAILY FOR THREE YEARS, OR PLACEBO CAPSULES. RESULTS CONFIRMED THAT MENAQ7 VITAMIN K2 NOT ONLY INHIBITED AGE-RELATED STIFFENING OF THE ARTERY WALLS, BUT ALSO MADE AN UNPRECEDENTED STATISTICALLY SIGNIFICANT IMPROVEMENT OF VASCULAR ELASTICITY.
- THE CARDIOVASCULAR STUDY APPEARS IN THE MAY 2015 ISSUE OF THROMBOSIS AND HAEMOSTASIS. TO REVIEW ONLINE, VISIT THE ONLINE ARCHIVE OF THROMBOSIS AND HAEMOSTASIS



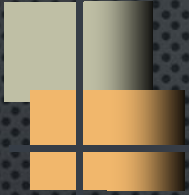


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I EAT IT TWICE A DAY**

**IT HELPS TAKE MY MIND OFF THE  
TERRIBLE CHEST PAINS I KEEP GETTING**

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# US DOCTORS URGE WIDER USE OF CHOLESTEROL DRUGS

BY MARILYNN MARCHIONE— NOV. 12, 2013 9:26 PM EST

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- THE GUIDELINES, ISSUED TUESDAY, NOV. 12, 2013 BY THE AMERICAN HEART ASSOCIATION AND AMERICAN COLLEGE OF CARDIOLOGY, ARE A BIG CHANGE.
- THE NATION'S FIRST NEW GUIDELINES IN A DECADE FOR PREVENTING HEART ATTACKS AND STROKES CALL FOR TWICE AS MANY AMERICANS — **ONE-THIRD OF ALL ADULTS — TO CONSIDER TAKING CHOLESTEROL-LOWERING** STATIN DRUGS.
- THE GUIDELINES, ISSUED TUESDAY BY THE AMERICAN HEART ASSOCIATION AND AMERICAN COLLEGE OF CARDIOLOGY, ARE A BIG CHANGE. THEY OFFER DOCTORS A NEW FORMULA FOR ESTIMATING A PATIENT'S RISK THAT INCLUDES MANY FACTORS BESIDES A HIGH CHOLESTEROL LEVEL, THE MAIN FOCUS NOW. THE FORMULA INCLUDES AGE, GENDER, RACE AND FACTORS SUCH AS WHETHER SOMEONE SMOKES.
- ...UNDER THE NEW ADVICE, ONE-THIRD OF U.S. ADULTS — 44 PERCENT OF MEN AND 22 PERCENT OF WOMEN — WOULD MEET THE THRESHOLD TO CONSIDER TAKING A STATIN. UNDER THE CURRENT GUIDELINES, STATINS ARE RECOMMENDED FOR ONLY ABOUT 15 PERCENT OF ADULTS.



# JANUARY 2021, JOURNAL: ATHEROSCLEROSIS – **STUDY REVEALED THAT PEOPLE TAKING STATIN MEDICATIONS HAD A HIGHER RATE OF CARDIOVASCULAR EVENTS THAN THOSE WHO WERE NOT ON STATINS.<sup>2</sup>**

---

- DESPITE THE POPULARITY OF STATINS, HEART DISEASE REMAINS THE NO. 1 CAUSE OF DEATH AND KILLED FAR MORE LAST YEAR IN THE U.K. THAN COVID
- IN 28,025 PARTICIPANTS THERE WERE MORE CARDIAC EVENTS IN PEOPLE TAKING STATINS THAN IN THOSE WITH THE SAME RISK FACTORS WHO DIDN'T TAKE STATINS
- THE STUDY PUBLISHED IN ATHEROSCLEROSIS INDICATES THAT EVEN WITH A HIGH CAC (CORONARY ARTERIAL CALCIUM) SCORE, TAKING STATINS DOES NOT REDUCE YOUR RISK OF A CARDIOVASCULAR EVENT AND MAY, IN FACT, INCREASE IT.<sup>8,9</sup>
- *A KEY MECHANISM IS THAT STATINS INCREASE PLAQUE DENSITY THEREBY PARADOXICALLY RAISING THE AGATSTON CAC SCORE — AS DENSITY IS UPWEIGHTED."*
- CAC SCORING EXPOSES PATIENTS TO THE SAME RADIATION AS 10 X-RAYS,<sup>17</sup>



# JANUARY 2021, JOURNAL: ATHEROSCLEROSIS – **STUDY REVEALED THAT PEOPLE TAKING STATIN MEDICATIONS HAD A HIGHER RATE OF CARDIOVASCULAR EVENTS THAN THOSE WHO WERE NOT ON STATINS.<sup>2</sup>**

DR. MALCOLM KENDRICK, A GENERAL PRACTITIONER WITH THE BRITISH NATIONAL HEALTH SERVICE, **EXPRESSED HIS DISBELIEF AT HOW WIDELY STATINS ARE USED DESPITE RESEARCH EVIDENCE THEY ARE NOT EFFECTIVE, AND POSSIBLY WORSE.**

HE WROTE:<sup>20</sup>

"NEW RESEARCH SHOWS THAT **THE MOST WIDELY PRESCRIBED TYPE OF DRUG IN THE HISTORY OF MEDICINE IS A WASTE OF MONEY.** ONE MAJOR STUDY FOUND THAT THE MORE 'BAD' CHOLESTEROL WAS LOWERED, THE GREATER THE RISK OF HEART ATTACKS AND STROKES. IN THE MIDST OF THE COVID-19 PANDEMIC, ALMOST EVERY OTHER MEDICAL CONDITION HAS BEEN SHOVED ONTO THE SIDELINES. HOWEVER, IN THE UK LAST YEAR (2021), HEART ATTACKS AND STROKES (CVD) KILLED WELL OVER 100,000 PEOPLE — WHICH IS AT LEAST TWICE AS MANY AS HAVE DIED FROM COVID-19.

CVD WILL KILL JUST AS MANY THIS YEAR, WHICH MAKES IT SIGNIFICANTLY MORE IMPORTANT THAN COVID, EVEN IF NO ONE IS PAYING MUCH ATTENTION TO IT RIGHT NOW."

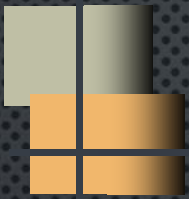




# DIAGNOSING HEART FAILURE

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- BEFORE ONE IS DIAGNOSED WITH HEART FAILURE, HE/SHE MAY THINK THAT BEING TIRED AND SHORT OF BREATH IS JUST A SIGN OF GROWING OLDER OR BEING "OUT OF CONDITION."
- SHORTNESS OF BREATH (DYSPNEA)
- DIFFICULTY BREATHING WHEN LYING DOWN
- SWELLING OF THE LEGS, ANKLES, AND FEET (EDEMA)
- GENERAL FATIGUE AND WEAKNESS
- MILD CONFUSION



# FOCUS ON ELEMENTS: TOTAL CHOLESTEROL

**Clinical Range** 140-200mg/dl

**Healthy Range** 150-180mg/dl

## **DECREASED in:**

Malnutrition  
Malabsorption  
Hyperthyroidism  
Myeloma  
Polycythemia  
Cancers  
Leukemia  
Severe liver disease  
Thalassemia  
Chronic anemia  
Infection  
Inflammation

**Drugs:** Cortisone; ACTH

## **Nutrients to consider:**

EPA/DHA, GLA, check liver function.

## **INCREASED in:**

Hypercholesterolemia  
Secondary hyperlipoproteinemias ie: kidney disease  
Hypothyroid  
Cirrhosis  
Diabetes mellitus  
Biliary obstruction: stone, carcinoma etc  
Kidney disease  
Pancreatic disease  
Pregnancy  
Fasting

## **Drugs:**

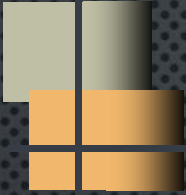
Progestins  
Anabolic steroids  
Corticosteroids  
Diuretics  
Cholesterol lowering drugs

## **Nutrients to consider:**

EPA/DHA, Garlic, GLA, Fatty Acids, Check Liver Function



# Focus on Elements: Triglycerides



**Clinical range** 45-180mg/dL    **Healthy range** 80-125mg.dl  
95% of tissue storage fat is triglycerides.

---

## **DECREASED in:**

Proteinemia  
Malnutrition  
Recent weight loss  
Vigorous exercise

## **Drugs:**

Vitamin C  
Alpha1 receptor blockers  
Phenformin  
Clofibrate  
Asparaginase  
Progestins  
Metformin  
Aminosalicylic acid

## **Nutrients to consider:**

chromium, vanadium

## **INCREASED in:**

High coronary risk with a low  
HDL cholesterol  
Family trait  
Liver disease  
Kidney disease  
Hypothyroidism  
Diabetes mellitus  
Alcoholism  
Gout  
Pancreatitis  
Acute myocardial infarction  
Acute illness (cold, flu etc.)  
Pregnancy  
Obesity

## **Drugs:**

Oral contraceptives  
Estrogens  
Beta-blockers  
Hydrochlorothiazide  
Anabolic steroids  
Corticosteroids  
Thiazide  
Diuretics  
Amiodarone  
Interferon

## **Nutrients to consider:**

chromium, vanadium and a low  
carbohydrate diet

# Focus on Elements: HDL Cholesterol

**Clinical range** 35-65mg/dL      **Healthy range** >60mg/dL.  
HDL below is considered at risk for heart attack.

---

## **DECREASED in:**

Sedentary lifestyle  
Obesity  
Smokers  
Diabetes mellitus  
Uremia  
Stress  
Illness  
Myocardial infarction  
Stroke  
Trauma  
Starvation  
Hypothyroidism  
Hyperthyroidism  
High triglycerides  
Liver disease  
Kidney disease  
Anemias  
Cancer  
Family traits

## **Drugs:**

Thiazides  
Beta blocking drugs  
Anabolic steroids  
Progestin  
Antihypertensives  
Neomycin  
Phenothiazine  
Probucol

**Nutrients:** Niacin,  
Chromium, Exercise

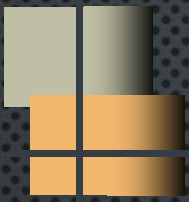
## **INCREASED in:**

Vigorous exercise  
Appropriate diet  
Moderate alcohol  
Insulin treatment  
Family traits  
Vitamins  
Phytosterols  
Tocotrienols  
Arginine  
Antioxidant vitamins

## **Drugs:**

Estrogens  
Birth control pills  
Clofibrate  
Atromid-S





# THE IMPORTANCE OF TRIGLYCERIDES AND HDL

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HDL IS CLOSELY RELATED TO TRIGLYCERIDES.

IT APPEARS COMMON FOR PEOPLE WITH HIGH TRIGLYCERIDES TO HAVE LOW HDL'S, AND THESE SAME PEOPLE ALSO TEND TO HAVE HIGH LEVELS OF CLOTTING FACTORS IN THEIR BLOOD STREAM, WHICH IS UNHEALTHY IN PROTECTING AGAINST HEART DISEASE.

THEREFORE, IN ADULTS, THE TRIGLYCERIDE/HDL "GOOD" CHOLESTEROL RATIO SHOULD BE BELOW 2.

- 2 OR LESS IS CONSIDERED IDEAL
- 4 IS CONSIDERED TO BE HIGH
- 6 MUCH TOO HIGH

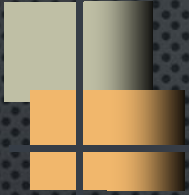
HDL IS PROTECTIVE AGAINST HEART DISEASE.

- HENCE, THE LOWER THE RATIO, THE BETTER!

THE LOWER THE TRIGLYCERIDES, OR THE HIGHER THE HDL, THE SMALLER THE RATIO BECOMES.

IT IS BELIEVED THAT THE TRIGLYCERIDE/HDL RATIO IS ONE OF THE MOST IMPORTANT PREDICTORS OF HEART DISEASE.





# THE IMPORTANCE OF TRIGLYCERIDES AND HDL CONTINUED

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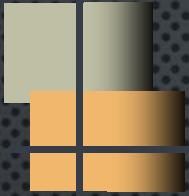
A HARVARD-LEAD STUDY AUTHOR REPORTED:

**“HIGH TRIGLYCERIDES ALONE INCREASED THE RISK OF HEART ATTACK NEARLY THREE-FOLD.”**

PEOPLE WITH THE HIGHEST RATIO OF TRIGLYCERIDES TO HDL — THE “GOOD” CHOLESTEROL — HAD 16 TIMES THE RISK OF HEART ATTACK AS THOSE WITH THE LOWEST RATIO OF TRIGLYCERIDES TO HDL IN THE STUDY OF 340 HEART ATTACK PATIENTS AND 340 OF THEIR HEALTHY, SAME AGE COUNTERPARTS.

THE CITATION ALSO STATED THAT **THE RATIO OF TRIGLYCERIDES TO HDL WAS THE STRONGEST PREDICTOR OF A HEART ATTACK**, EVEN MORE ACCURATE THAN THE LDL/HDL RATIO.

– GAZIANO JM, HENNEKENS CH, O'DONNELL CJ, BRESLOW JL, BURING JE. FASTING TRIGLYCERIDES, HIGH-DENSITY LIPOPROTEIN, AND RISK OF MYOCARDIAL INFARCTION. CIRCULATION. 1997 OCT 21;96(8):2520-5.



## NIACIN BETTER THAN STATINS

- “NIACIN IS FAR MORE POWERFUL THAN STATIN DRUGS (ZOCOR, LESCOL, LIPITOR, MEVACOR, PRAVACHOL) IN RAISING HDL CHOLESTEROL. DDN 8-19-2002



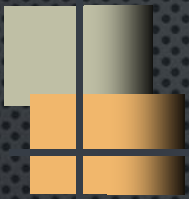


# VITAMIN C BETTER THAN STATINS

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- A REVIEW OF NINE DIFFERENT STUDIES INDICATES ADULTS WHO REGULARLY TAKE VITAMIN C PILLS PROVIDING GREATER THAN 700 MILLIGRAMS PER DAY WILL EXPERIENCE A 25% DROP IN THEIR RISK FOR CORONARY HEART DISEASE.
- MAJOR OUTCOMES IN MODERATELY HYPERCHOLESTEROLEMIC, HYPERTENSIVE PATIENTS RANDOMIZED TO PRAVASTATIN VS. USUAL CARE: THE ANTIHYPERTENSIVE AND LIPID-LOWERING TREATMENT TO PREVENT HEART ATTACK TRIAL (ALLHAT-LLT). JAMA. 2002;288(23):2998-3007.
- STUDIES HAVE DEMONSTRATED THAT STATINS ADMINISTERED TO INDIVIDUALS WITH RISK FACTORS FOR CORONARY HEART DISEASE (CHD) REDUCE CHD EVENTS. HOWEVER, MANY OF THESE STUDIES WERE TOO SMALL TO ASSESS ALL-CAUSE MORTALITY OR OUTCOMES IN IMPORTANT SUBGROUPS. PRAVASTATIN DID NOT REDUCE EITHER ALL-CAUSE MORTALITY OR CHD SIGNIFICANTLY WHEN COMPARED WITH USUAL CARE IN OLDER PARTICIPANTS.
  - KNEKT P, RITZ J, PEREIRA MA ETAL. ANTIOXIDANTS VITAMINS AND CORONARY HEART DISEASE RISK; A POOLED ANALYSIS OF 9 COHORTS. THE AMERICAN JOURNAL OF CLINICAL NUTRITION. 2004;80(6):1508-1520.





# Focus on Elements: LDL Cholesterol

**Clinical range** 50- 130mg/dL    **Healthy range** 55-110mg/dL.

**Critical range** > 160mg/dL

Note: A low LDL cholesterol can prevent Heart Attacks.

## **DECREASED in:**

Family traits  
Severe illness  
Proteinemia

## **Drugs:**

Oral estrogen therapy

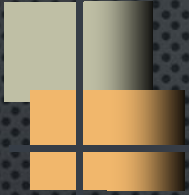
## **INCREASED in:**

Family traits  
Diabetes mellitus  
Hypothyroidism  
Kidney disease  
High saturated and hydrogenated fat diet  
Pregnancy  
Multiple Myeloma  
Cancer  
Anorexia nervosa

## **Drugs:**

Anabolic steroids  
Antihypertensive drugs  
Beta-blockers  
Progestin  
Carbamazepine

**Nutrients to consider:** EPA/DHA, Chromium, Garlic

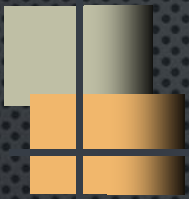


# HIGH LDL HELPS FIGHT INFECTION

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- POPULATIONS WITH INVERSE ASSOCIATION WITH CHOLESTEROL AND MORTALITY.
  - CHRONIC KIDNEY DISEASE
  - CONGESTIVE HEART FAILURE
  - COPD
  - GERIATRICS
  - CANCER SURVIVORS
    - ARCHIVES OF MEDICAL SCIENCE 2007 3,4A:S74-S80
    - DECEMBER 2007





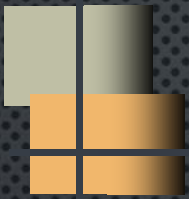
# THE BENEFITS OF HIGH CHOLESTEROL

BY UFFE RAVNSKOV, MD, PHD

FROM THE WESTIN A PRICE FOUNDATION WISE TRADITIONS 8-2009

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- **BENEFITS OF LDL**
- LDL MAY NOT ONLY BIND AND INACTIVATE DANGEROUS BACTERIAL TOXINS; IT SEEMS TO HAVE A DIRECT BENEFICIAL INFLUENCE ON THE IMMUNE SYSTEM ALSO, POSSIBLY EXPLAINING THE OBSERVED RELATIONSHIP BETWEEN LOW CHOLESTEROL AND VARIOUS CHRONIC DISEASES.

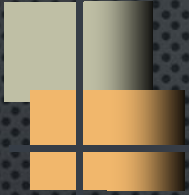


## VLDL CHOLESTEROL

**Clinical range** 5-40mg/dL **Healthy range** 10-20mg/dL

Review and consider “Triglyceride” study. Triglycerides are not soluble in blood and are transported as VLDL.





# THE BENEFITS OF HIGH CHOLESTEROL

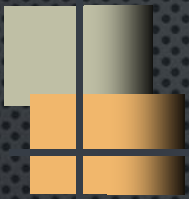
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FROM THE WESTIN A PRICE FOUNDATION WISE TRADITIONS 8-2009

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- PEOPLE WITH HIGH CHOLESTEROL LIVE THE LONGEST EMERGES CLEARLY FROM MANY SCIENTIFIC PAPERS. CONSIDER THE FINDING OF DR. HARLAN KRUMHOLZ OF THE DEPARTMENT OF CARDIOVASCULAR MEDICINE AT YALE UNIVERSITY, WHO REPORTED IN 1994 THAT OLD PEOPLE WITH LOW CHOLESTEROL DIED TWICE AS OFTEN FROM A HEART ATTACK AS DID OLD PEOPLE WITH A HIGH CHOLESTEROL.<sup>1</sup>
- NOW CONSIDER THAT MORE THAN 90 % OF ALL CARDIOVASCULAR DISEASE IS SEEN IN PEOPLE ABOVE AGE 60 ALSO AND THAT ALMOST ALL STUDIES HAVE FOUND THAT HIGH CHOLESTEROL IS NOT A RISK FACTOR FOR WOMEN.<sup>2</sup> THIS MEANS THAT HIGH CHOLESTEROL IS ONLY A RISK FACTOR FOR LESS THAN 5 % OF THOSE WHO DIE FROM A HEART ATTACK.
- SIX OF THE STUDIES FOUND THAT TOTAL MORTALITY WAS INVERSELY ASSOCIATED WITH EITHER TOTAL OR LDL-CHOLESTEROL, OR BOTH. THIS MEANS THAT IT IS ACTUALLY MUCH BETTER TO HAVE HIGH THAN TO HAVE LOW CHOLESTEROL IF YOU WANT TO LIVE TO BE VERY OLD.





# THE BENEFITS OF HIGH CHOLESTEROL

BY UFFE RAVNSKOV, MD, PHD

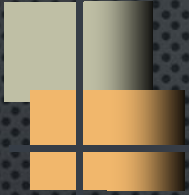
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## CHOLESTEROL AND CHRONIC HEART FAILURE

- RESEARCHERS AT SEVERAL GERMAN AND BRITISH UNIVERSITY HOSPITALS FOUND THAT THE RISK OF DYING FOR PATIENTS WITH CHRONIC HEART FAILURE WAS STRONGLY AND INVERSELY ASSOCIATED WITH TOTAL CHOLESTEROL, LDL-CHOLESTEROL AND ALSO TRIGLYCERIDES; **THOSE WITH HIGH LIPID VALUES LIVED MUCH LONGER THAN THOSE WITH LOW VALUES.<sup>11,12</sup>**
- OTHER RESEARCHERS HAVE MADE SIMILAR OBSERVATIONS. THE LARGEST STUDY HAS BEEN PERFORMED BY PROFESSOR GREGG C. FONOROW AND HIS TEAM AT THE UCLA DEPARTMENT OF MEDICINE AND CARDIOMYOPATHY CENTER IN LOS ANGELES.<sup>13</sup> THE STUDY, LED BY DR. TAMARA HORWICH, INCLUDED MORE THAN A THOUSAND PATIENTS WITH SEVERE HEART FAILURE. **AFTER FIVE YEARS 62 PERCENT OF THE PATIENTS WITH CHOLESTEROL BELOW 129 MG/L HAD DIED, BUT ONLY HALF AS MANY OF THE PATIENTS WITH CHOLESTEROL ABOVE 223 MG/L.**





# THE BENEFITS OF HIGH CHOLESTEROL

BY UFFE RAVNSKOV, MD, PHD

FROM THE WESTIN A PRICE FOUNDATION WISE TRADITIONS 8-2009

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“HIGH CHOLESTEROL IS ASSOCIATED WITH LONGEVITY IN OLD PEOPLE. IT IS DIFFICULT TO EXPLAIN AWAY THE FACT THAT DURING THE PERIOD OF LIFE IN WHICH MOST CARDIOVASCULAR DISEASE OCCURS AND FROM WHICH MOST PEOPLE DIE (AND MOST OF US DIE FROM CARDIOVASCULAR DISEASE), HIGH CHOLESTEROL OCCURS MOST OFTEN IN PEOPLE WITH THE LOWEST MORTALITY. HOW IS IT POSSIBLE THAT HIGH CHOLESTEROL IS HARMFUL TO THE ARTERY WALLS AND CAUSES FATAL CORONARY HEART DISEASE, THE COMMONEST CAUSE OF DEATH, IF THOSE WHOSE CHOLESTEROL IS THE HIGHEST, LIVE LONGER THAN THOSE WHOSE CHOLESTEROL IS LOW?”





\*\*\*\*\*LANCET 3-2023:

## HIGH CHOLESTEROL, INCREASED INFLAMMATION

- AN ANALYSIS OF THE ROLE OF INFLAMMATION AND CHOLESTEROL IN PRODUCING CARDIOVASCULAR EVENTS LIKE HEART ATTACKS, CONGESTIVE HEART FAILURE, AND STROKES.
- A LOT OF PEOPLE NOW THAT ARE AT HIGH RISK OR KNOWN TO HAVE CARDIOVASCULAR DISEASE ALREADY TAKE A STATIN TO LOWER CHOLESTEROL,
- WHAT THEY FOUND WHEN THEY LOOKED AT OVER 31,000 PATIENTS, INFLAMMATION PLAYED A MUCH BIGGER ROLE THAN LDL CHOLESTEROL IN PEOPLE WHO ARE ALREADY ON STATINS. WHEN THEY COMPARED THE HIGHEST VERSUS THE LOWEST RISK OF INFLAMMATION, THERE IS A 31% INCREASED RISK OF HAVING A CARDIOVASCULAR EVENT WITH INCREASED INFLAMMATION. THAT'S ALSO ABOUT A 7% INCREASE RISK FOR JUST HAVING A HIGHER LDL.

THERE ARE TARGETED ANTI-INFLAMMATORY THERAPIES. CANAKINUMAB [ILARIS], COLCHICINE. BEMPEDOIC ACID [NEXLETOL]

**NOTE: NOT ONE WORD ABOUT DIET, HEALTHY LIFESTYLE OR NATURAL WAYS TO REDUCE INFLAMMATION.**

# THE BENEFITS OF HIGH CHOLESTEROL, BY UFFE RAVNSKOV, MD, PHD FROM THE WESTIN A PRICE FOUNDATION WISE TRADITIONS 8-2009

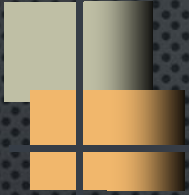
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About the Author

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# HIGH CHOLESTEROL AND \*\*\*\* LDL CHOLESTEROL FACTORS WITH OPTIMAL TRIGLYCERIDES AND HDL

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- LOW THYROID: CHECK T3 FREE
- THYROID MEDICATION- NO LONGER EFFECTIVE
- EXCESS IODINE SUPPLEMENTATION CAUSING LOW THYROID
- HIGH FERRITIN
- LOW VITAMIN D
- HIGH HEAVY METALS: MERCURY, LEAD, ALUMINUM, ARSENIC ETC.
- HIGH EXPOSURE TOXIC CHEMICALS- PESTICIDES, CLEANING PRODUCTS ETC.
- HEPATITIS
- INFECTION- BACTERIAL, VIRAL OR FUNGAL



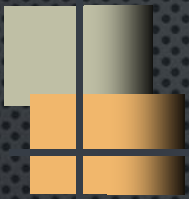


# STATIN STUDY IN LANCET, FDA, JUPITER TRIAL, DIABETES, CANCER, CATARACTS, NEUROLOGICAL ISSUES ETC. AUGUST 10, 2024

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- A 2024 LANCET STUDY CONFIRMS THAT **STATINS INCREASE DIABETES RISK BY 27% WITH HIGH-INTENSITY STATINS RAISING THE RISK BY 36%.**
- **STATINS MAY ALSO INCREASE RISKS OF CANCER, CATARACTS AND NEUROLOGICAL ISSUES. LONG-TERM USE IS ASSOCIATED WITH HIGHER PANCREATIC CANCER RISK, PARTICULARLY AFTER FIVE YEARS OF USE**
- **INSULIN RESISTANCE, NOT HIGH LDL CHOLESTEROL, MAY BE THE PRIMARY DRIVER OF ATHEROSCLEROSIS.**
- A GROUNDBREAKING STUDY PUBLISHED IN 2024 IN THE LANCET<sup>1</sup> HAS NOW PROVIDED THE MOST COMPREHENSIVE EVIDENCE TO DATE ON THIS CONNECTION, CONFIRMING AND EXPANDING UPON FINDINGS FIRST HINTED AT IN EARLIER RESEARCH, INCLUDING THE LANDMARK JUPITER TRIAL FROM 2008.<sup>2</sup>
- THIS NEW META-ANALYSIS, CONDUCTED BY THE CHOLESTEROL TREATMENT TRIALISTS' (CTT) COLLABORATION, DELVES DEEP INTO INDIVIDUAL PATIENT DATA FROM MULTIPLE LARGE-SCALE, LONG-TERM RANDOMIZED CONTROLLED TRIALS. ITS FINDINGS NOT ONLY SOLIDIFY OUR UNDERSTANDING OF THE STATIN-DIABETES LINK BUT ALSO OFFER CRUCIAL INSIGHTS INTO THE MAGNITUDE, TIMING AND RISK FACTORS ASSOCIATED WITH THIS SIDE EFFECT.
- **THE JUPITER TRIAL — A PIVOTAL MOMENT IN STATIN RESEARCH**
- IN 2008, THE JUPITER (JUSTIFICATION FOR THE USE OF STATINS IN PREVENTION: AN INTERVENTION TRIAL EVALUATING ROSUVASTATIN) TRIAL MARKED A SIGNIFICANT MILESTONE IN OUR UNDERSTANDING OF STATIN THERAPY.<sup>3</sup>
- THEN THE U.S. FOOD AND DRUG ADMINISTRATION (FDA) REVIEWED JUPITER'S RESULTS, IT "REPORTED A 27% INCREASE IN INVESTIGATOR-REPORTED DIABETES MELLITUS IN ROSUVASTATIN-TREATED PATIENTS COMPARED TO PLACEBO-TREATED PATIENTS."





## B-TYPE NATRIURETIC PEPTIDE (BNP)

- THIS 32-AMINO-ACID POLYPEPTIDE IS SECRETED BY THE VENTRICLES OF THE HEART IN RESPONSE TO EXCESSIVE STRETCHING OF HEART MUSCLE CELLS IN THE VENTRICLES. BNP IS ELEVATED IN LEFT VENTRICULAR DYSFUNCTION AND CORRELATES WITH BOTH THE SEVERITY OF SYMPTOMS AND THE PROGNOSIS IN CONGESTIVE HEART FAILURE. **BNP IS A USEFUL MARKER OF CARDIOVASCULAR RISK, EVEN IN PEOPLE WITH NO CLINICAL EVIDENCE OF CARDIOVASCULAR DISEASE. THE LEVELS OF BNP PREDICT THE RISK OF HEART FAILURE, FIRST CARDIOVASCULAR EVENTS, ATRIAL FIBRILLATION, AND STROKE OR TRANSIENT ISCHEMIC ATTACK.**





# BNP: THIS BLOOD TEST PREDICTS DEATH, EVEN WHEN EVERYTHING ELSE LOOKS "GREAT"

- RONALD GRISANTI D.C., D.A.B.C.O., D.A.C.B.N., M.S.
- **25% INCREASE IN DEATH IF THE BNP IS ELEVATED ONE YEAR AFTER A HEART ATTACK. AND DON'T FORGET A BNP PERSISTENTLY OVER 80 PG/ML CAN BE AN IMPORTANT INDICATOR OF WHEN A MORE INVASIVE APPROACH IS NEEDED SUCH AS BYPASS SURGERY.**
- IN FACT, A **BNP TWICE THE NORMAL RANGE CAN INDICATE A QUADRUPLE RISK OF DEATH** IN FOLKS WHO DON'T EVEN HAVE SYMPTOMS.
- THERE IS NO OTHER TEST THAT HAS THE ABILITY TO HAVE THIS CRYSTAL BALL POWER OF DETERMINING YOUR CHANCES OF SUCCUMBING TO HEART FAILURE EVEN IF YOU HAVE NO SYMPTOMS.
- AS A BRIEF EXPLANATION, BNP IS A NEURO-HORMONE MADE IN AND RELEASED FROM THE HEART VENTRICLE. THE VENTRICLES OF THE HEART MAKE UP THE BIGGEST PART OF THE HEART MUSCLE THAT SQUEEZES BLOOD THROUGH ALL THE REST OF THE BODY.
- WHEN THE VENTRICLES ARE UNDER TOO MUCH TENSION OR THE WORK LOAD ON THE VENTRICLES IS TOO MUCH THE BNP GOES UP. BASICALLY, IF THE HEART IS WORKING OVERTIME TO FUNCTION, THE BNP IS MADE IN LARGER QUANTITIES TO HELP RESCUE THE HEART. THE KEY THING TO REMEMBER IS THE BNP WILL COMMONLY INCREASE LONG BEFORE YOU HAVE ANY SIGNS OR SYMPTOMS THAT YOU HAVE ANY TROUBLE. THIS IS ONE REASON TO MAKE SURE YOU KEEP YOUR BLOOD PRESSURE WELL WITHIN NORMAL LEVELS BECAUSE IT REDUCES STRESS ON THE VENTRICLES
- ON THE OTHER HAND KNOWLEDGEABLE "RESEARCH" CARDIOLOGISTS OVER TEN YEARS AGO PUBLISHED IN THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION STATED THE **BNP TEST "WAS A STRONGER BIOMARKER FOR CARDIOVASCULAR DISEASE AND DEATH THAN THE C-REACTIVE PROTEIN."**
- ONE OF THE REASONS YOU HAVE NOT HEARD MORE ABOUT THIS TEST IS BECAUSE THERE IS NO DRUG THE PHARMACEUTICAL HAS TO TREAT THE ELEVATED BNP.
- **BNP HAS PROVIDED INFORMATION ABOUT THE RISK OF DYING THAN NO OTHER TEST CAN, YET IT HAS BEEN PERSISTENTLY IGNORED.**
- THE LEADING CARDIOLOGY JOURNAL SAYS, "SERIAL DETERMINATIONS OF BNP LEVELS DURING OUTPATIENT FOLLOW-UP AFTER ACUTE CORONARY SYNDROME PREDICTS THE RISK OF DEATH OR NEW CONGESTIVE HEART FAILURE.
- **HOW TO TREAT AN ELEVATED BNP**
- THE SOLUTION IS TAKING **REAL VITAMIN E WHICH INCLUDES FOUR TOCOPHEROLS AND FOUR TOCOTRIENOLS (ALPHA, BETA, GAMMA, AND DELTA).**
- IT TURNS OUT THAT THE **TOCOTRIENOLS** IS A PRECURSOR TO NATRIURETIC HORMONE AND IS AN ESSENTIAL PART OF WHAT THE BODY USES TO MAKE BNP TO HELP HEAL THE HEART.
- **GAMMA TOCOTRIENOLS CAN LOWER BNP.**

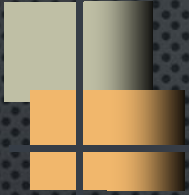




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# BNP: AGE-BASED RANGES

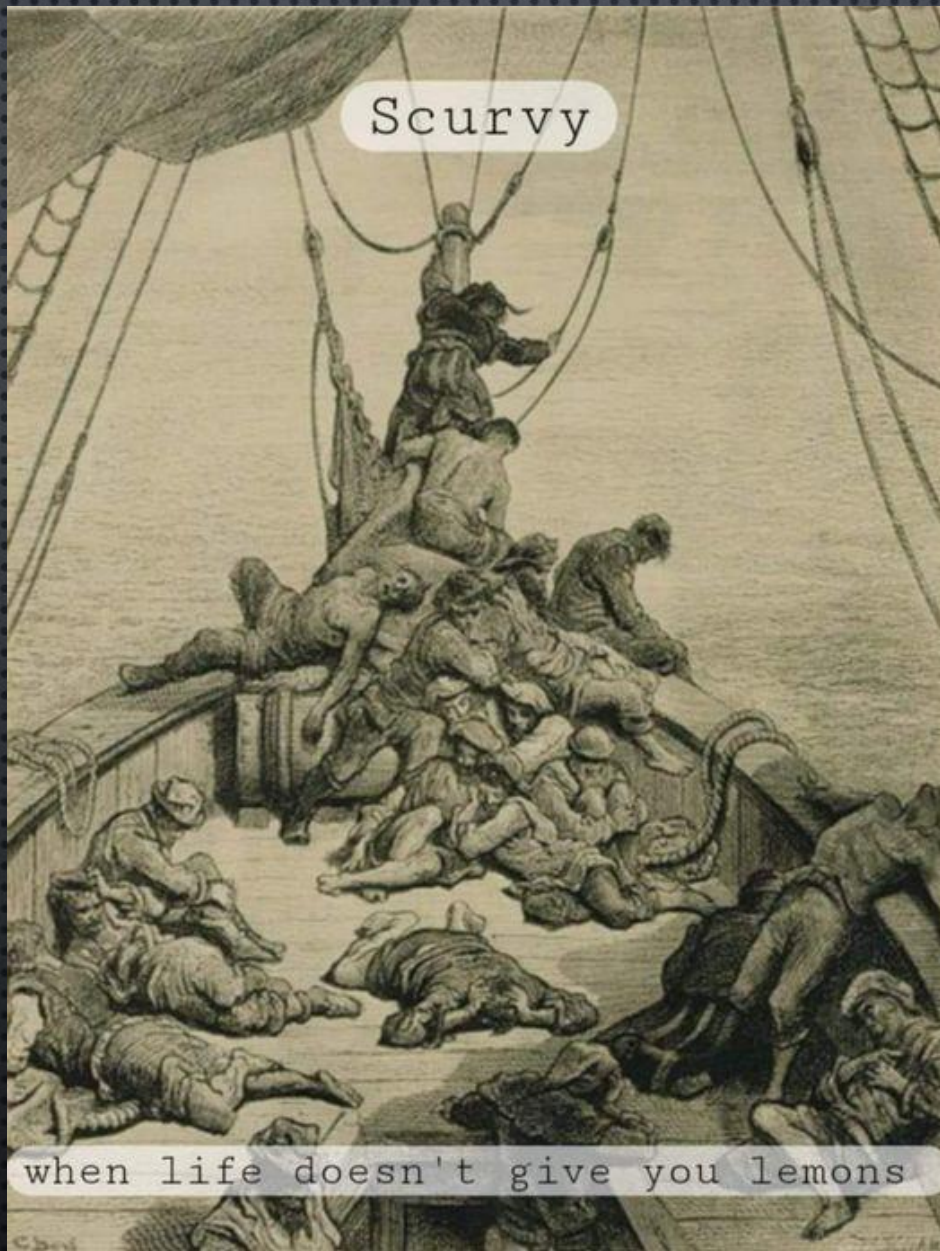
## APEX CLINICAL LABORATORIES, INC

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- MALES:
  - <45 YRS 0-125 PM/ML
  - 45-54 0-138
  - 55-64 0-177
  - 65-74 0-229
  - 75+ 0-852
- SBN RANGE: HEALTHY 0-40
- LABCORP CLINICAL RANGE 0-100



# Scurvy



when life doesn't give you lemons



# BNP: PATIENT HEADING TO CONGESTIVE HEART FAILURE AND KIDNEY DISEASE.

The patient 57 y/o male, first presented 8-31-2009, diagnosed with kidney disease associated with diabetes.

He travels and half heartedly followed his program and didn't get retested as recommended.

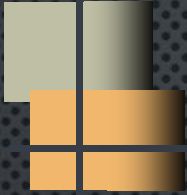
He called me in February 22, 2010 with complaints of water retention/swelling of the ankles that would come and go. At times it would be real bad but then the next day it would be better. His MD prescribed HCTZ to reduce the fluid. The MD did not do any testing other than a Blood pressure.

I recommended he do a complete SBN panel with Vitamin D and the BNP.

I called him immediately and basically told him he is a walking disaster just waiting for something to happen, either kidney disease/failure or heart attack.

Test Description	Date:	Current Result	Current Rating	Prior Result	Delta
		02/23/2010		08/31/2009	
Glucose		239.00	HI	171.00	☹
Hemoglobin A1C (Gly-Hgh)		9.60	HI	12.80	☺
Uric Acid		7.10	hi	7.00	☹
BUN (Blood Urea Nitrogen)		27.00	HI	29.00	☺
Creatinine		2.06	HI	2.01	☹
GFR EST (Glomerular Filtration R		33.00	LO	34.00	☹
BUN / Creatinine Ratio		13.00	lo	14.00	☹
Sodium		137.00	lo	138.00	☹
Vitamin D 25-Hydroxy		43.20	lo	24.60	☺
B-type Natriuretic Peptide		1498.50	HI		





# PT. W.V. 102 Y/O FEMALE 124LBS

18 YRS AS PATIENT, PRESENTED ON 11-9-2010

WITH UNUSUAL FATIGUE AND SWELLING IN THE ANKLES

---

DATE	BNP	INR	CREAT	GFR	UA PROTEIN	
11-9-2010	1,865		1.52	31	500	+3 ANKLES
12-14-2010	2,060		1.43	34	300+	
12-27-2010	2,815	1.00*	1.45	33	300+	+2 ANKLES
1-10-2011	2,501	1.10**	1.46	33	100+	
1-24-2011	1,620	1.00	1.38	35		
3-7-2011	1,142	1.00	1.35	36		
3-28-2011	1,298	1.00#	1.49	32	50+	+1 ANKLES
4-29-2011	845	1.00#	1.46	29		

\*PT STARTED TAKING 2 BABY ASPIRIN; \*\*PT HAS STATED TAKING 3 BABY ASPIRIN

#PT ON 1 BABY ASPIRIN/DAY

1-12-2011 PATIENT FEELS BETTER HAS A LITTLE MORE ENERGY AND STILL NO PAIN OF ANY KIND, JUST TIRED AND WANTS TO GO BACK TO WORK...PLAYING ORGAN EVERY SUNDAY.

SHE ALSO WONDERS WHEN SHE CAN START DRIVING AGAIN.

# TROPONIN I (CARDIAC) AN ISOENZYME

- CERTAIN SUBTYPES OF TROPONIN (CARDIAC TROPONIN I AND T) ARE VERY SENSITIVE AND SPECIFIC INDICATORS OF DAMAGE TO THE HEART MUSCLE (MYOCARDIUM). THEY ARE MEASURED IN THE BLOOD TO DIFFERENTIATE BETWEEN UNSTABLE ANGINA AND MYOCARDIAL INFARCTION (HEART ATTACK) IN PATIENTS WITH CHEST PAIN. A PATIENT WHO HAD SUFFERED FROM A MYOCARDIAL INFARCTION WOULD HAVE AN AREA OF DAMAGED HEART MUSCLE AND SO WOULD HAVE ELEVATED CARDIAC TROPONIN LEVELS IN THE BLOOD.[1]
- ELEVATED BLOOD LEVELS OF OTHER COMMONLY USED BIOMARKERS SUCH AS CK-MB ARE NOT SPECIFIC FOR CARDIAC INJURY BECAUSE THESE MARKERS ARE PRESENT AT LOW LEVELS IN OTHER TISSUE TYPES THROUGHOUT THE BODY. **cTnI IS FOUND ONLY IN CARDIAC TISSUE AND, THEREFORE, BLOOD LEVELS ARE ELEVATED ONLY AS A RESULT OF CARDIAC INJURY.** THE NATIONAL ACADEMY OF BIOCHEMISTRY HAS PROPOSED MYOGLOBIN AND cTnI USED IN CONJUNCTION AS THE IDEAL MARKERS FOR THE DIAGNOSIS OF AMI.
- ALTHOUGH THE cTnI ASSAY HAS BEEN PROVEN TO BE A VALUABLE DIAGNOSTIC TOOL, ASSAY RESULTS MUST ALWAYS BE INTERPRETED IN CONJUNCTION WITH OTHER TEST RESULTS SUCH AS THE ECG OR IMAGING STUDIES AND WITH THE PATIENT HISTORY AND SYMPTOMS. IN ADDITION, PHYSICIANS SHOULD NOT RELY ON A SINGLE MEASUREMENT OF ANY CARDIAC BIOMARKER; SERIAL MEASUREMENTS ARE RECOMMENDED FOR AN ACCURATE DIAGNOSIS.
- **PATIENTS WITHOUT ST-ELEVATIONS BUT WITH POSITIVE TROPONIN RESULTS HAVE INCREASED RISK OF DEATH OR MYOCARDIAL INFARCTION**
- WHEN INTERPRETING THE RESULTS OF cTnI ASSAYS IT IS IMPORTANT TO REMEMBER THAT, ALTHOUGH cTnI IS **100% SPECIFIC FOR CARDIAC INJURY AND DAMAGE, IT IS NOT 100% SPECIFIC FOR AMI.**
- CARDIAC:
  - CARDIAC AMYLOIDOSIS
  - CARDIAC CONTUSION
  - CARDIAC SURGERY AND HEART TRANSPLANT
  - DEFIBRILLATION
  - CLOSURE OF ATRIAL SEPTAL DEFECTS
  - CORONARY VASOSPASM
  - HEART FAILURE
  - HYPERTROPHIC CARDIOMYOPATHY
  - MYOCARDITIS
  - PERCUTANEOUS CORONARY INTERVENTION
  - RADIOFREQUENCY ABLATION
  - SUPRAVENTRICULAR TACHYCARDIA
- DRUG-INDUCED CARDIOTOXICITY IS COMMON TO ALL CLASSES OF THERAPEUTIC DRUGS. IT IS ESSENTIAL THAT CARDIOTOXICITY IS DETECTED WITH A HIGH DEGREE OF SENSITIVITY AND SPECIFICITY. THE NEWLY DEVELOPED TROPONINS ARE ESPECIALLY USEFUL IN THIS CONTEXT
- CARDIAC-SPECIFIC TROPONIN I LEVELS TO PREDICT THE RISK OF MORTALITY IN PATIENTS WITH ACUTE CORONARY SYNDROMES. N ENGL J MED 1996;335:1342-9.





## INR : INTERNATIONAL NORMALIZED RATIO, INR/PT-USED MOSTLY TO MONITOR PLAVIX OR COUMADIN DOSING

KERRY PREWITT, M.D., FACC

ROBERT I. HAMBY, M.D., FACC, FACP

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- THE INR RATIO HELPS PHYSICIANS MONITOR PATIENTS TAKING ANTICOAGULANT MEDICATIONS
- THE INR IS A METHOD OF EXPRESSING THE RESULTS OF A PROTHROMBIN TIME (PT) BLOOD TEST.
- THE INR IS BASED ON AN INTERNATIONAL STANDARD THAT AUTOMATICALLY CORRECTS FOR VARIATIONS BETWEEN LABS. THUS, USING THE INR, THE PT MEASUREMENT FROM ONE LAB CAN BE COMPARED TO A PT MEASUREMENT FROM ANY OTHER LAB IN THE WORLD, EVEN IF THEY USE DIFFERENT METHODS TO MEASURE PT. THE RESULTING MEASUREMENT IS OFTEN REFERRED TO AS THE INR/PT.
- THE INR/PT WAS DEVELOPED SPECIFICALLY FOR PATIENTS WHO ARE TAKING WARFARIN, AN ANTICOAGULANT THAT INHIBITS THE FORMATION OF BLOOD CLOTS. WARFARIN IS PRESCRIBED TO PATIENTS WHO ARE AT ELEVATED RISK OF A BLOOD CLOT CAUSING A HEART ATTACK OR STROKE.
- THE INR/PT TEST IS ADMINISTERED ROUTINELY TO MONITOR THE BLOOD LEVEL OF THE MEDICATION, WHICH MUST KEPT WITHIN A VERY NARROW RANGE TO BE EFFECTIVE WHILE LESSENING RISK OF UNCONTROLLED BLEEDING.
- THE INR/PT TEST MAY NOT BE EFFECTIVE IN PATIENTS WITH LIVER DISEASE OR PATIENTS SUFFERING FROM ANTIPHOSPHOLIPID SYNDROME. SIMILARLY, PATIENTS WHO ARE BEING GIVEN HEPARIN, ANOTHER ANTICOAGULANT GIVEN INTRAVENOUSLY DURING SURGERY OR AT THE INITIATION OF ANTICOAGULATION THERAPY, MAY NOT BENEFIT FROM THE TEST SINCE HEPARIN DOES NOT PROLONG THE PT.





# INR : INTERNATIONAL NORMALIZED RATIO, INR/PT-

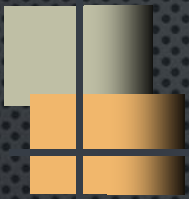
KERRY PREWITT, M.D., FACC

ROBERT I. HAMBY, M.D., FACC, FACP

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- ASIDE FROM SOME CHANGES IN CERTAIN MEDICATIONS THAT MAY BE ORDERED BY ONE'S PHYSICIAN, NO SPECIAL PREPARATIONS ARE NECESSARY FOR THIS TEST. A HEALTHY PERSON WILL HAVE AN INR OF 1.0. HOWEVER, PATIENTS TAKING ANTICOAGULANTS TO REDUCE THE RISK OF BLOOD CLOTS MAY BE ADVISED TO MAINTAIN AN INR BETWEEN 2.0 AND 3.5. A HIGHER NUMBER INDICATED GREATER ANTI-COAGULATION. CONDITIONS THAT MAY WARRANT A HIGHER-THAN-NORMAL INR INCLUDE ATRIAL FIBRILLATION, ARTIFICIAL HEART VALVES, AND THROMBOPHLEBITIS (E.G., *DEEP VEIN THROMBOSIS*, *SUPERFICIAL VEIN THROMBOSIS*). *SUPERFICIAL VEIN THROMBOSIS* IS USUALLY NOT TREATED WITH WARFARIN.



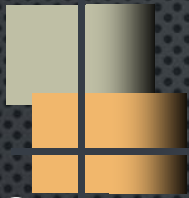


# HIGH BLOOD PRESSURE

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- 25% OF THE ADULT POPULATION IN THE US HAVE HIGH BLOOD PRESSURE.
- DECREASING THE BP FROM 160/90 TO 140/80 DECREASED THE RISK OF HEART DISEASE MORE THAN 30%.
- DEFICIENCIES OF THE FOLLOWING NUTRIENTS CAUSE OR CONTRIBUTE TO HIGH BP:
  - POTASSIUM
  - CALCIUM
  - MAGNESIUM
  - OMEGA-3 (FISH OIL OR FLAXSEED OIL)
  - GARLIC
  - HAWTHORN EXTRACT
  - CoQ-10
  - VALERIAN ROOT.





# HYDROCHLOROTHIAZIDE:

## DIURETIC WITH LOTS OF SIDE EFFECTS

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- CONSTIPATION; DIARRHEA; DIZZINESS; LIGHTEADEDNESS (ESPECIALLY WHEN SITTING UP OR STANDING); LOSS OF APPETITE; NAUSEA; TEMPORARY BLURRED VISION.
- SEVERE ALLERGIC REACTIONS (RASH; HIVES; ITCHING; DIFFICULTY BREATHING; TIGHTNESS IN THE CHEST; SWELLING OF THE MOUTH, FACE, LIPS, OR TONGUE); CONFUSION; DARK URINE; DECREASED URINATION; FAINTING; FAST OR IRREGULAR HEARTBEAT; FEVER, CHILLS, OR PERSISTENT SORE THROAT; INCREASED THIRST; JOINT PAIN, SWELLING, WARMTH, OR REDNESS (ESPECIALLY OF THE BIG TOE JOINT); MENTAL OR MOOD CHANGES; MUSCLE PAIN OR CRAMPS; NUMBNESS OR TINGLING; RED, SWOLLEN, BLISTERED, OR PEELING SKIN; SEIZURES; SEVERE OR PERSISTENT DIZZINESS; SEVERE OR PERSISTENT NAUSEA OR STOMACH PAIN; SHORTNESS OF BREATH; UNUSUAL BRUISING OR BLEEDING; UNUSUAL DROWSINESS, RESTLESSNESS, TIREDNESS, OR WEAKNESS; UNUSUALLY DRY MOUTH; VOMITING; YELLOWING OF THE EYES OR SKIN. METABOLIC EFFECTS: RAISES CHOLESTEROL, RAISES URIC ACID, HYPERGLYCEMIA, LOW SERUM, MAGNESIUM, HYPONATREMIA, HYPERCALCEMIA, METABOLIC ALKALOSIS, INCREASE VLDL ~ 50%, MAY DECREASE INSULIN SECRETION, INCREASES BUN AND CREATININE –KIDNEY DISEASE, INCREASES TRIGLYCERIDES, INCREASES GALL STONE FORMATION, THROMBOCYTOPENIA, HEMOLYTIC ANEMIA.
- [HTTP://WWW.DRUGS.COM/SFX/HYDROCHLOROTHIAZIDE-SIDE-EFFECTS.HTML#ixzz0qY0nhV6Z](http://www.drugs.com/sfx/hydrochlorothiazide-side-effects.html#ixzz0qY0nhV6Z)





# LAY LECTURE: BP AND PULSE

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- WHO LIVES THE LONGEST? HOW LONG DO YOU WANT TO LIVE?
- #1 CAUSE OF DEATH
- WHAT ARE THE EFFECTS OF AGING? PREVENTABLE? DELAYABLE?
- PLAQUES/ BLOOD CLOTS/ INFLAMMATION
- MEDICAL TREATMENTS: SURGERY, DRUGS, TRANSPLANT
- CIRCULATION: TRANSPORTING OXYGEN AND NUTRIENTS
- WHAT DO THESE MEAN? HOW DO THEY CHANGE WITH AGE?
  - BLOOD PRESSURE
  - PULSE:

• 60	86,400	
• 65	93,600	+7,200
• 70	100,800	+14,400
• 75	108,000	+21,600
• 80	115,200	+28,800
• 55	79,200	-7,200
- NUTRIENTS: WHAT SHOULD YOU TAKE: BASICS VIT C, E, BETA CAROTENE, COQ10, MAGNESIUM, SELENIUM, CARNITINE
- HOW DO YOU KNOW WHAT YOU REALLY NEED?

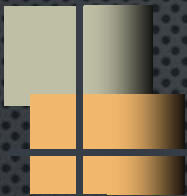




# HEART RATE REDUCTION AND LONGER LIFE

- HUMANS, WITH A MEAN HEART RATE OF 70 B.P.M. AND A LIFE EXPECTANCY OF 80 YEARS, ARE AN EXCEPTION TO THE RELATIONSHIP BETWEEN HEART RATE AND LIFE EXPECTANCY SHOWN IN MAMMALS, AS THEIR LIFE EXPECTANCY IS HIGHER THAN THAT PREDICTED BY THEIR HEART RATE. **IT HAS BEEN ESTIMATED THAT A DECREASE IN HEART RATE FROM 70 TO 60 B.P.M. WOULD FURTHER INCREASE LIFE EXPECTANCY FROM 80 TO 93.3 YEARS IN HUMANS.**[17](#)
- **HEART RATE REDUCTION REDUCES MYOCARDIAL ENERGY EXPENDITURE**  
ADENOSINE TRIPHOSPHATE (ATP) IS THE PRIMARY SOURCE OF ENERGY IN THE HEART AND IS USED FOR ELECTRICAL EXCITATION, CONTRACTION, RELAXATION, AND RECOVERY OF THE RESTING ELECTROCHEMICAL GRADIENTS ACROSS MEMBRANES.
- THE HEART MAY SUDDENLY INCREASE ITS OUTPUT UP TO SIX-FOLD, THUS REQUIRING A HUGE AMOUNT OF ENERGY, UNLIKE OTHER TISSUES, IT ONLY STORES LOW QUANTITIES OF ATP, JUST SUFFICIENT TO SUPPORT A FEW BEATS. HOWEVER, THE LOW ATP LEVELS IN THE HEART ARE COUNTERBALANCED BY A HIGHER LEVEL OF CREATINE PHOSPHATE WHICH PERMITS AVAILABILITY OF ATP FROM THE ADENOSINE DIPHOSPHATE, THROUGH A PHOSPHORYLATION REACTION CATALYZED BY CREATINE KINASE.[23](#)
- IN THE HEART, ATP IS SYNTHESIZED IN THE MITOCHONDRIA FROM A VARIETY OF AEROBIC SUBSTRATES.[24](#) AT REST, ATP IS ALSO GENERATED FROM FATTY ACID  $\beta$ -OXIDATION (60–70%) AND CARBOHYDRATE CATABOLISM (30%) INCLUDING EXOGENOUS GLUCOSE AND LACTATE CATABOLISM. AMINO ACIDS AND KETONE BODIES ARE UTILIZED AS SUBSTRATES, HOWEVER, LESS FREQUENTLY.
  - OXFORD JOURNALS
  - EUROPEAN HEART JOURNAL SUPPLEMENTS
  - VOLUME 7, SUPPL H
  - PP. H16-H21
  - [EURHEARTJSUPP.OXFORDJOURNALS.ORG/CGI/CONTENT/FULL/7/SUPPL\\_H/H16](http://eurheartjsupp.oxfordjournals.org/cgi/content/full/7/suppl_h/h16)





## JEAN C STAGE 4 LIVER CARCINOMA

### IN JUST 1 MONTH: DON'T STOP!

3-4-2010 email;

Dr Merkle, The latest tests for Jean C, stage 4 liver carcinoma patient, are entered and report ordered. Would you give your advice as to any additional suggestions. She is feeling excellent and power walking 2 miles a day. Her oncologist is pleasantly surprised how well she is looking and feeling at this time.

Thanks for your time,  
Dr. Gary Jxxxxxx

Test Description	Date:	03/04/2010		02/08/2010	Delta
Alk. Phosphatase 25-530		106.00	Opt	130.00	☺
Creatine Kinase					
LDH		892.00	Hi	1,662.00	☺
SGOT (AST)		30.00	hi	29.00	☹
SGPT (ALT)		23.00	Opt	32.00	☺
GGT		38.00	Opt	49.00	☺
Serum Iron					
ESR-Erythrocyte Sed Rate, Westerg		35.00	Hi	87.00	☺

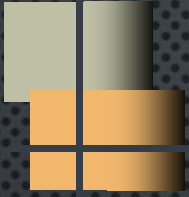


# A PILOT CLINICAL STUDY OF LIQUID UBIQUINOL SUPPLEMENTATION ON CARDIAC FUNCTION IN PEDIATRIC

## DILATED CARDIOMYOPATHY

- [FONG-LIN CHEN](#)<sup>1,2,3</sup> [PO-SHENG CHANG](#)<sup>4,5</sup> [YI-CHIN LIN](#)<sup>4</sup> AND [PING-TING LIN](#)<sup>4,6,7</sup> [AUTHOR INFORMATION](#) [ARTICLE NOTES](#) [COPYRIGHT AND LICENSE INFORMATION](#) [PMC DISCLAIMER](#)
- BACKGROUND: PEDIATRIC DILATED CARDIOMYOPATHY (PDCM) IS A LIFE-THREATENING TYPE OF CARDIAC MUSCLE DYSFUNCTION IN CHILDREN. UBIQUINONE IS A LIPID-SOLUBLE NUTRIENT THAT PARTICIPATES IN ENERGY SYNTHESIS. RECENTLY, A NOVEL HYDROPHILIC UBIQUINOL SUPPLEMENT WAS DEVELOPED. THE PURPOSE OF THIS STUDY WAS TO ASSESS THE EFFECT OF LIQUID UBIQUINOL SUPPLEMENTATION (10 MG/KG BODY WEIGHT/DAY) ON CARDIAC FUNCTION IN CHILDREN WITH PDCM. METHODS: TEN CHILDREN DIAGNOSED WITH PDCM WERE RECRUITED TO THIS STUDY AND ADMINISTERED WITH LIQUID UBIQUINOL FOR 24 WEEKS. THE CARDIAC FUNCTION WAS MEASURED BY ECHOCARDIOGRAPHY. THE NEW YORK HEART ASSOCIATION (NYHA) FUNCTIONAL CLASSIFICATION WAS USED TO ASSESS SYMPTOMS OF HEART FAILURE. PLASMA COENZYME Q10 LEVELS WERE MEASURED DURING THE STUDY. RESULTS: EJECTION FRACTION (EF) AND FRACTIONAL SHORTENING (FS) WERE SIGNIFICANTLY HIGHER THAN THE BASELINE VALUES UNTIL WEEK 16 OF SUPPLEMENTATION. **SUBJECTS WHO HAD HIGHER PLASMA COENZYME Q10 CONCENTRATION HAD SIGNIFICANTLY BETTER EF AND FS VALUES. IN ADDITION, 30% OF THE SUBJECTS SHOWED IMPROVEMENT IN THE NYHA CLASSIFICATION AFTER 24 WEEKS OF SUPPLEMENTATION. CONCLUSION: LIQUID UBIQUINOL SUPPLEMENTATION IS ASSOCIATED WITH AN INCREASE THE LEVEL OF COENZYME Q10 TO COMPLEMENTARY IMPROVE CARDIAC FUNCTION (PARTICULARLY EF AND FS) AND AMELIORATE THE SYMPTOMS OF HEART FAILURE IN CHILDREN WITH PDCM.**

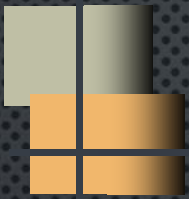




# NUTRIENTS FOR THE HEART

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- CoQ-10 300 MG/DAY
- VITAMIN C 3,000 MG/DAY
- VITAMIN E 800 IU/DAY
- SELENIUM 30 MCG/DAY
- MAGNESIUM 300 MG/DAY
- L-CARNITINE 1,500 MG/DAY



## VITAMIN E

---

- REDUCED ALL DEATH BY 27%
- REDUCED HEART DISEASE BY 41%
- REDUCED CANCER BY 22%
- -*NATIONAL INSTITUTE OF HEALTH*
- **JUST ONE VITAMIN!**





FETTERMAN EVENTS

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Science Based Nutrition



# Science Based Nutrition

## Foundational Laboratory Analysis Lecture

Van D. Merkle DC, DABCI, CCN, DCBCN

[www.ScienceBasedNutrition.com](http://www.ScienceBasedNutrition.com)





# **Thyroid hormone factors and conditions and how to fix them**

**Presenter: Van D Merkle DC, DCBCN, DABCI**

The top of the image features a decorative border with a dark red background. It contains several overlapping semi-circular shapes. Some of these shapes are filled with a pattern of concentric dotted lines, while others are solid dark red. The patterns are arranged in a way that creates a sense of depth and movement.


# The Doctor of the future...

The top of the image features a decorative header with a dark red background. It contains several overlapping semi-circular shapes. Some of these shapes are filled with a pattern of concentric dotted lines, while others are solid dark red. The patterns are arranged in a way that creates a sense of depth and movement.

**...is you!**

# Vitamin Sales Skyrocket in the Pandemic, but Buyer Beware [www.medscape.com](http://www.medscape.com)

- Mar 2, 2021 – The *supplement market*, valued at \$48 billion in 2019
- 2020 - \$52 Billion due to pandemic
- 2021 - \$58 Billion is projected for 2021

- 
- CHICAGO—January 16, 2019—More than 4 in 5 **American** adults (86 percent) **take vitamins** or **supplements**, according to a recent online survey conducted by The Harris Poll on behalf of the **American** Osteopathic Association. Jan 16, 2019

# CHICAGO, Jan. 16, 2019 /PRNewswire/ --

## NOTE: This was before the pandemic!

- More than 4 in 5 American adults (86 percent) take vitamins or supplements, according to a recent online survey conducted by The Harris Poll on behalf of the American Osteopathic Association.
- However, **only about a quarter (24 percent)** of those taking vitamins or supplements received **objective test results** indicating they have a nutritional deficiency.



# The Joint Chiropractic 6-14-2022

- Text:
- Join today and receive 4 visits for only \$45.00

# The Harris Poll on behalf of the American Osteopathic Association. Jan 16, 2019

## Why people take vitamins:

- **Recommendations from a physician (51 percent)**
- Their own research, based on personal needs (39 percent)
- Recommendations from a friend or family member (22 percent)
- The survey also found 13 percent of Americans choose their vitamins or supplements based on what items interest them in stores
- 13 percent go off of recommendations from a trainer, exercise professional or nutritionist
- 6 percent base their choices on endorsements by celebrities or social media influencers

# Medical physicians survey in 2020

Dynamic Chiropractic June 10, 2022

- **23.80 percent of medical physicians intended to leave their practice within 2 years**
- **31.4 percent intended to reduce their hours**
- **Quite possible that has gotten worse.**

# Chief Complaint: Cancer of the Omentum (Abdominal lining)

This 79 year old patient is now getting to meet her great grandkids this summer as we have helped her reverse the course of a very significant disease i.e. cancer of the omentum or abdominal lining. Scans show that there was also involvement in distal organs including lymph node enlargement in the anterior cardio-phrenic and pericardial regions as well as gastro-hepatic ligament, concerning for nodal metastasis. This lymph node involvement is scary for sure and due to location the heart and liver regions will be key areas of monitoring as this case progresses/regresses. The tumor markers CA 125, CA 15-3 and CEA have all improved dramatically. CA125 (female organ cancers) is down over 285 points to a nearly optimal level, CA15-3 (liver) is down 10 points and CEA (gut related cancers) is down 111 points. These values started off as CODE BLUE values meaning emergency levels. They have now regained nearly optimal status.

She and her kids relayed to me during a follow-up appointment that after 2 weeks on the program she no longer had to go to her MD to have fluid drained (ascites) from her abdomen. They had previously been taking 1-1.5L of fluid off of her belly multiple times per week. After 2 months on the program and following a very strict diet and vitamin/supplement plan she was down 75-80 lbs. Much of it was by clearing up the fluid issues.

## End Stage: Omentum cancer

Masses/mets in heart, lymph nodes, Liver, pericardium and other organs.

Test Description	3/6/2019	5/13/2019	8/20/2019	Healthy
CA 125	315.70 Very High	123.20 Very High	37.10 High	0.00 - 18.00
CA 15-3	29.00 High	25.40 High	19.40 High	0.00 - 15.00
CEA	114.20 Very High	26.80 Very High	3.00 High	0.00 - 2.00

**After 2 weeks on the program she no longer had to go to her MD to have fluid drained (ascites) from her abdomen. They had previously been taking 1-1.5L of fluid off of her belly multiple times per week.**

Dr. Dyer





Dr. Dale Kelly

Science Based Nutrition Member



### **PATIENT 1 – Patient got off 250 units a day of insulin in just 3 days**

- Patient was an executive and policy writer for Blue Cross Blue Shield...250 units a day of insulin was over \$42,000.00/year.
- C-Peptide: 0.05 indicating that the Pancreas had not yet shut down.
- Within 3 days of starting the SBN program, the patient was able to get off of insulin.

### **PATIENT 2 – PT told she would be dead by Christmas Then: Glucose dropped from 600 to 98 in 3 months! A1C dropped from over 15.5 to 5.5 in 5 months.**

- Medical doctor told patient to get her affairs in order and that she would be dead by Christmas. Patient was allergic to every diabetes medication and patient was unable to drive due to deteriorating vision.
- Her glucose ran 500-600 every day.
- Patient's goal was to survive until June to see her son get married.

#### **On the SBN program:**

- Patients glucose dropped from 600 to 98 in 3 months.
- Patients A1c dropped >15.5 to 5.5 in 5 months.
- Patient is now physically active doing over 14,000 steps a day when before she could barely get around the house.  
*"I was ready to go home and die, until I met Dr. Kelly."*

# Thyroid in 20 minutes

- Start with minimum of T4, T3 Free and TSH
- Even better is to add: Free T4 and T3 Total



# T3 Uptake and T7: basically, useless today

- T3 Uptake is **an indirect measurement of the amount of thyroid-related binding proteins that happen to be in the blood.** This includes albumin, TBG, and prealbumin.
- [www.restartmed.com](http://www.restartmed.com) › t3-uptake
- Apr 16, 2020 · Unfortunately, as far as clinical utility is concerned, **T3 Uptake is not a helpful lab test and you can get more information from the other thyroid lab tests which are available.**
- **It is better to just order the Free T3 and Free T4.**

**T7 Free Thyroxine Index is a calculation to calculate Free T4. Now unnecessary: just do a Free T4.**

- T7 Free Thyroxine Index The T7 Index is used to **calculate Free T4, one of the two active thyroid hormones in your bloodstream.** The T7 Index is a calculated Free T4 score and is not as accurate as a machine run Free T4 test.

# Easy Thyroid Analysis: First things

- Is patient on Synthroid or other prescription thyroid meds?
  - Why is patient on Synthroid?
- History:
  - Thyroid removed: Yes or No?
  - Thyroid cancer: Yes or No?
  - Graves' disease?
  - Hashimoto's?

# Easy Thyroid - Patient on Synthroid but still has thyroid and does not have cancer, or history of Graves'

- Medical doctors will monitor T4 and TSH. Why?
  - Question: does an optimal T4 and TSH indicate optimal thyroid function?
  - Answer: NO - the T4 needs to be converted into the more active Free T3 that is used by the body...
  - It is true that TSH and T4 can be optimal and still have low or even very low thyroid function because the Synthroid, which is T4 keeps the TSH low.
  - Most of this T4 to T3 Free conversion occurs in the liver, kidneys and GI tract.
  - Liver, kidney and GI tract can lower thyroid function.
  - **Thyroid Peroxidase assists the conversion process of T4 into T3 Free, however, Thyroid Peroxidase Antibodies halt or slow the conversion of T4 into T3.**

# **Easy Thyroid - Patient on Synthroid but still has thyroid and does not have cancer, or history of Graves'**

- TSH and T4 but also need to have at least T3 Free but also T3 Total and T4 Free.
- If TSH is low and T4 and T3 Free are optimal then Synthroid level is sufficient.
- If TSH is high and T4 and T3 Free are low then dose of Synthroid is insufficient or not effective, maybe patient is resistant to the Synthroid medication.

# Easy Thyroid- Patient on Synthroid but still has thyroid and does not have cancer, or history of Graves'

- **Is it possible to get this patient off of Synthroid?**

Maybe but Synthroid has rare side effects and one of the 'safest' drugs to be on.

- **However, the lower level of Synthroid needed is always a good goal.**

CAUTION: needing higher and higher levels of Synthroid is bad, the patient is becoming resistant or even 'allergic' to Synthroid - this can be a crisis.

- **DO NOT CAUSE A THYROID PROBLEM by trying to get a patient off of Synthroid too quickly.**



# Easy Thyroid - Patient on Synthroid but still has thyroid and does not have cancer, or history of Graves'

- First start the patient on your vitamin and diet program for a week or 2 then possibly have patient reduce Synthroid by 25% for 2 weeks and retest the TSH, T4 and Free T3.
- The TSH will likely be elevated but if it is over 10, (or increased significantly since first test) indicate that was too fast of a reduction in Synthroid especially if the T4 and T3 Free has notably decreased.
- If the T4 and T 3 Free are still optimal or only a little lower, then continue with your diet and nutrition program for another few weeks then retest the TSH, T3 Free and T4.

# Easy Thyroid - Patient on Synthroid but still has thyroid and does not have cancer, or history of Graves'

- Is it even possible to get a patient off of Synthroid?
- **Thyroglobulin (Tg)** is produced only by the follicular cells of the thyroid gland and used entirely within the thyroid gland protein content of the thyroid gland.
- **If thyroglobulin is zero then there is no thyroid gland function**, which is preferred if there has been a history of thyroid cancer.
  - Patient will be on Synthroid or similar for life.
- **Thyroglobulin Antibodies attack thyroglobulin proteins and can destroy the thyroid gland or at least reduce thyroid gland function.**
  - These antibodies are associated with Graves' and Hashimoto's diseases.

# Easy Thyroid - Patient on Synthroid

## History of cancer, or Thyroid gland removed maybe due to Graves'

- This patient will need to be on Synthroid for life.
- If thyroid cancer, then testing TSH and Thyroglobulin are necessary.
- Thyroglobulin indicates current thyroid gland function.
- With Thyroid cancer, removal or radiation is used to completely destroy the thyroid gland. If Thyroglobulin is not zero, this indicates residual thyroid gland tissue, which is bad. **WHY?**

# Is Thyroid Cancer a 'Good' Cancer? Experts & Patients Say No

Marilynn Larkin Medscape: October 10, 2024

- Thyroid cancer treatments carry some risks that shouldn't be overlooked and may affect recovery for years. These include:
  - Recurrent laryngeal nerve damage: Thyroid surgery can lead to vocal cord paralysis, affecting speech and swallowing.
  - Hypoparathyroidism: Post-surgical damage to the parathyroid glands can cause long-term calcium regulation problems resulting in pain and emergency department visits as well as lifelong supplementation with calcium and vitamin D.
  - Radioactive iodine (RAI) treatment: RAI can have side effects such as dry mouth, tear duct obstruction, salivary gland dysfunction, and an increased risk of secondary cancers.
  - Psychosocial Impact: Being told they have cancer can create significant psychological distress for patients, including fear of recurrence, body image concerns, and anxiety, all of which persist even with a "good prognosis."

# Is Thyroid Cancer a 'Good' Cancer? Experts & Patients Say No

Marilynn Larkin Medscape: October 10, 2024

- There was a great NEJM article about 10 years ago showing the **massive increase in small thyroid cancers because of over screening in South Korea**, but not surprisingly the mortality rate remained low and flat, i.e. it didn't decrease, **because they were removing such small tumors that likely never would have been harmful**. I'm not saying all thyroid cancer is harmless, and I'm not commenting on calling it a good cancer or not, but the risks of over diagnosis/overtreatment are also real. [Dr. David Tridgell](#)
- Nice article, but it's also appropriate to point out to Medscape readers that between 5-10% of the population have occult thyroid cancer at a single point in time, and that the US Preventive Services Task Force actively recommends that patients not be screened for Thyroid cancer because it does not improve mortality and it is associated with increased harms from Overdiagnosis and Overtreatment. Dr. Eric Hect

# Parathyroid glands- post thyroidectomy

- Caution for post thyroidectomy: **the most frequent complication occurring in 20-50% of patients is inadvertent devascularization, nerve damage or removal of the parathyroid glands leading to hypocalcemia and the need for calcium and vitamin D supplementation.** However, a low PTH (Parathyroid Hormone) value does not always cause hypocalcemia nor does a normal PTH value guarantee normocalcemia.
- Regular testing of calcium and vitamin D would be required if such is the case.



# Easy Thyroid - Thyroid cancer and TSH

- TSH stimulates thyroid gland tissue, which is bad with a thyroid cancer history.
- Therefore, the dose of Synthroid needs to be high **to keep the TSH as low as possible EVEN IF THAT MEANS THAT THE T4 OR T3 FREE are elevated.**

# Graves' Disease

- TSH is low
- T4, T4 Free, T3 Total and T3 Free are high or very high
- TPO Ab and Tg Ab are often elevated
- Check for infection
- Consider natural treatments for infection and inflammation
- Reduce inflammatory factors

# Hyperthyroidism

- Graves' disease is most common
  - More prevalent in females
  - Average onset is 20 - 40 year of age
  - An auto immune disorder resulting in:
    - Thyroid enlargement
    - Hyperactivity
    - Serum antibodies to fractions of the thyroid gland

# Graves' Autoimmune Thyroid Disease

- Graves' Disease
  - **Thyroid-Stimulating Immunoglobulin (TSI) - this is the primary test for Graves' disease**

# Easy Thyroid - Graves' Disease

- **The TPO Ab, Tg Ab and Reverse T3 might be a way for the body to reduce the activity of the thyroid function** but these antibodies and Reverse T3 might be a trigger for the thyroid to be hyperactive.
- Graves' disease is another form of autoimmune thyroiditis, with symptoms of weight loss, insomnia, swelling of the thyroid gland, anxiety, palpitations, irritability, brittle or thinning hair, eyes that bulge out, weight loss, thinning skin, unusual fingernail growth, rapid heart rate usually over 100bpm, sweating, and nervousness and will bounce from increased to decreased energy.
- These findings could be due to poor response to thyroid or other medications. Regardless, the thyroid metabolism is high and modification of medication might be considered.
- Steroids and hormone replacement therapy and other drugs can affect thyroid function. **Inflammation of the thyroid can be associated with infection, inflammation, high Ferritin, low vitamin D, low minerals and high toxic heavy metals including uranium, arsenic, chloride, fluoride and bromide. Gluten sensitivity has been known to be a primary factor with Graves' disease and hyperthyroid autoimmune conditions.**
- Treatment considerations: gluten free diet, vitamin D based on testing and other vitamins.
- **L-Carnitine 2-4 grams/day has been shown to have the ability to reverse hyperthyroid symptoms within a couple of weeks.**
- Retesting is indicated within a couple of weeks and a second opinion is always welcome and encouraged.

# Hyperthyroid Symptoms

- Cold intolerance
- Weight changes (usually weight loss)
- Sweating
- Fatigue
- Irritability
- Nervousness
- Menstrual irregularity
- Weakness (commonly upper extremity)



# Hyperthyroid Symptoms Cont.

- Muscle atrophy
- Fasciculations (involuntary contractions/twitching of muscle fibers)
- Exaggerated deep tendon reflexes
- Babinski's sign?

# Hyperthyroid Symptoms Cont.

- Dysphagia
- Hoarseness
- Respiratory weakness
- Upper eyelid not completely opens
- Weakness in chewing/tongue

# Hyperthyroid Testing

- Low TSH
- Elevated:
  - T4
  - Free thyroxine index (FTI)
  - Total T3
  - Serum T3
  - Thyroid resin

# Hyperthyroid Testing Cont.

- For autoimmune
  - ANA (anti-nuclear antibodies)
  - Serum thyroperoxidase
  - **Thyroglobulin antibody titers**
  - **Antithyroglobulin autoantibodies**
    - **Positive in 85% of Hashimoto's disease and ~80% of Graves' disease**
    - Hashimoto's thyroiditis is very unlikely cause of hypothyroidism in the absence of thyroglobulin and microsomal antibodies

# Hyperthyroid Findings

- Alkaline phosphatase: increased
- Calcium: increased
- Anemia
- Magnesium decreased

# Hyperthyroid Natural Alternatives

- Anti-inflammatory properties
  - **L-Carnitine 2-4 gms/day**
  - Vit C
  - Bioflavonoids
  - Turmeric (Cercumin)
  - Ginger
  - Bromelain
  - GLA
  - Magnesium
  - Iodine sources:
    - Iodoral
    - Norwegian Sea Kelp
    - Rad Block



**Total T3** Clinical Range: 24-39% Healthy Range: 35-40%

**Free T3** Clinical Range: 2.0 to 4.4 pg/mL ; Healthy range: 2.6-3.8 pg/mL

- Increased in:
  - Hyperthyroidism
  - Thyrotoxicosis
  - Hypoproteinemia
  - Hepatitis
  - Nephrosis
  - Metastatic carcinoma
  - Pulmonary insufficiency
- Decreased in:
  - Hypothyroidism
  - Cretinism
  - Myxedema
  - Pregnancy
  - Simmonds disease
  - Anovulatory drugs

# T4

**Clinical Range: 4.5-12mcg/dl**

**Healthy Range: 7.1-9mcg/dl**

- Increased in:
  - Hyperthyroidism
  - Thyrotoxicosis
  - Early hepatitis
  - Pregnancy
  - Anovulatory drugs
- Decreased in:
  - Cretinism
  - Myxedema
  - Hypothyroidism
  - Hypoproteinemia
  - Nephrosis
  - Simmonds disease

# To lower T4 and T3 consider

- L-Carnitine 2-4 grams
- Iodine
- Liver (check for elevated SGPT)
- Eat : rutabaga, cauliflower, brussel sprouts, cabbage, kale, sauerkraut
  - Cooking decreases this effect.

# To Increase T4, T3: consider

- Raw thyroid
- Tyrosine
- Iodine
- *Avoid:*
  - Soybeans, rutabaga, cauliflower, brussel sprouts, cabbage, kale, sauerkraut

# Hashimoto's Thyroiditis

- An auto immune condition.
- Commonly will present as hyperthyroidism during the initial acute phase of the disease but tends to eventually result in a hypothyroid condition, due to destruction of the hormone producing thyroid tissue.
- Antithyroglobulin Antibody (ATA) in 70% of the cases and Antimicrosomal Antibodies or **Thyroid Peroxidase (TPO) antibodies are found in 95% of the cases.**

## Hashimoto's Thyroiditis Confusion- **FACT** Experts Speak:

- Hashimoto's disease: FACT
- Q: 12 year old diagnosed with Hashimotos are there any alternative tests that should be done?? Interesting to note is that a major personality change started in late september...within weeks of a tetanus shot. Scott Close DC



# Hashimoto's Thyroiditis

A1: Dear Scott,

In our practice, we do a version of NAET we call SRT, "Sensitivity Removal Technique." Tetanus is very first allergen we neutralize with EVERY patient. I learned this trick of the trade many years ago from a chiropractor friend of mine who is the best EAV-tester I have ever known. He said tetanus \*always\* shows up as an adverse allergen, even if you have only had one shot and it was 50 years ago. We have been using this vial in our program since 2000 and I can attest he is absolutely right.

He thought the mechanism of action for tetanus toxoid is that is "locks up" intracellular fluidity and messaging. I believe this is correct. If you have access to this technique, purchase or make a DTaP vial and treat him with it. He could quickly become better. Also be sure he is on TONS of omega 3s, far beyond the "usual" dose. This helps cell fluidity.

I believe that tetanus vaccine is most neurotoxic of ALL vaccines. Tetanus toxin (tetanospasmin) is made by deactivating it with formaldehyde and ammonium sulfate. It is filtered and adsorbed onto aluminum phosphate. Tetanospasmin is one of the strongest neurotoxins known to man.

In a tetanus infection, tetanospasmin is released from a C.tetani when a spore germinates. The toxin spreads through tissue spaces into the lymphatic and vascular systems. It enters the nervous system at the neuromuscular junctions and nerve trunks, then passes into the CNS by retrograde axonal transport. It blocks the release of inhibitory neurotransmitters GABA at motor end plates, leading to the spasmotic disease we characteristically think of as "tetanus."

But what if some of the toxin isn't completely inactivated in the vaccine? or some of the active toxin slips through the filter? (there is no assurances that every particle is inactive). GABA neurons in the brain provide the major inhibitory role of in regulating behavior. It is my understanding that if the GABA receptors are blocked or disrupted, anxiety disorders, epilepsy, schizophrenia and insomnia can result. He has lost his inhibitory pathways. You should write this up as a case report and be sure to report it to VAERS.

So, yes, the tetanus shot can result in this behavior. NO vaccine is safe at any age, even if given alone.

As for his Hashimotos, certainly the vaccine led to autoimmune disruption. Be sure he is on 100mcg/day of L-selenomethione. It is the form of selenium that has been shown in the literature to reduce thyroid antibodies by as much as 60% over 3-4 months (mechanism of action is that it acts like a "mop" to absorb excess H2O2 used in the coupling of iodine to tyrosine. Iodine supplementation should always coupled with selenium) Hope that helps, Dr Sherri Tenpenny Cleveland, Ohio [www.DrTenpenny.com](http://www.DrTenpenny.com)

# Hashimoto's Thyroiditis

A2: Dear Scott,

The reason for thyroid problems of your son might be mercury-containing thimerosal in the tetanus shot. Mercury affects thyroid gland and in our study from 1999, patients with Hashimoto disease showed increased inflammatory response to mercury. You can download the article from our website: [www.melisa.org](http://www.melisa.org) (Research literature) If your son has "silver" fillings (amalgam containing mercury), you should contact an experienced dentist and consult possible replacement.

If you are interested to find out if your son is sensitized to thimerosal and inorganic mercury, you can test him in MELISA test. Contact Dr Lana Foree in San Francisco, the contact is on our website.

Best regards

Vera

Ps. The abstract of article regarding patients with autoimmune thyroiditis is given below.

Mercury and nickel allergy: risk factors in fatigue and in autoimmunity Sterzl I et al. Neuroendocrinology Letters 1999; 20:221-228

This study further explores the link between hypersensitivity to dental metals with chronic fatigue syndrome (CFS). It looks at 22 patients with autoimmune thyroiditis, 28 fatigued patients free from endocrinopathy and 22 fatigued professionals with no evidence of autoimmunity. All had their dental amalgams replaced with non-metallic materials. After six months, many patients reported disappearance of many symptoms previously encountered. Their MELISA response also fell considerably. We suggest that hypersensitivity to metal affects the hypothalamic-pituitary-adrenal axis (HPA axis) and indirectly triggers psychosomatic symptoms characterising CFS, fibromyalgia and other diseases of unknown etiology.

# Hashimoto's Thyroiditis

A3: check the tetanus shot for mercury containing agents as "conservatives" and do a lead and mercury and arsenic challenge test. Also a Iodine/Iodide (Iodoral 50mg) challenge test, if less than 45 mg (90%) Iodine comes out in the 24hr urine following the 50 mg load, he needs long term Iodoral replacement. When detox and nutritional support has provided the best possible circumstances, thyroid live cell therapy injections can be considered to boost his own thyroid production and hopefully reduce the dosage of medication.

Good luck, R. Trossel

# Hashimoto's Thyroiditis

A4: Hi Scott,

It sure seems to be a correlation to the vaccine due to the dramatic change in his physical and emotional health near the time of its use. It may be that a homeopathic remedy would help here. Homeopathic Thuja is usually given for negative effects from a vaccine, but it does not necessarily fit the symptoms of the case. I would consider finding a great constitutional homeopath to work with him. I am not sure where you live, but I bet there is someone in your area. I think Andre Saine in Canada will do phone consults???

Anyway, what really hit me but does not seem to correlate to the timing of the vaccine is that people with Hashimotos are often very gluten sensitive and also gluten sensitive folks often have many mood disorders. Does he eat a lot of foods with gluten? Could you get him to do a totally strict gluten free diet for a month or two to see how he responds?

Take care,

Laura Schissell, ND, DC

# Hashimoto's Thyroiditis

A5: Some Hashimotos are related to gluten sensitivity even with negative antibodies, may try gluten free diet, though time course certainly suggests possible reaction to tetanus. Look at DAN, defeat autism now web site, not that he has autism, but some of their detoxification techniques may help, ie post vaccine.

John Abell M.D.

A6: This is a classic autoimmune reaction caused by corruption of the immune system due to the inoculation, as explained in the documents on my website. I have reversed many such cases with my Hippocrates protocol.

Dr Carley

# Hashimoto's Thyroiditis

A7: Thyroid tests become unreliable in the face of significant antibody elevation. It could take weeks to significantly lower the TSH and many more weeks to improve symptoms completely. In fact symptom improvement may never happen with synthroid if your son has difficulty converting synthroid (synthetic T4) into T3. This is why Armour (or other more natural thyroids) which contain about 20% T3, is far preferable in my opinion. Selenium, 200 mcgs/day has been shown in recent studies to gradually lower thyroid peroxidase antibodies over 6-12 months. This of course, is about symptom relief, not addressing the underlying problems which have lead to the Hashimoto's.

I'd focus, as is often emphasized by Gary, on the total body burden of pathogens. Do a provoked urine for heavy metals, viral screen, etc., but don't expect tests to show everything! Chelate, treat pathogens and support detox pathways in all the ways regularly discussed on this site. Best of luck.

Rick Linchitz MD (Linchitz Medical Wellness, PLLC  
LinchitzWellness.com 516-759-4200)



# Hashimoto's Thyroiditis

A8: Doctor,

You can help any autoimmune disease by supporting regulatory T cell function. Vit D 4-5,000IU QD), Glutathione (I use a high dose liposomal delivery; Oxicell from Apex Energetics) and EPA & DHA all support regulatory T cell function.

You can also order a T&B lymphocyte & NK Cell panel(#505015), an IL-10(#826746) and a TNFa(#140673) from Laboratory Co-Op (1-866-999-4041). These tests will tell you if you are dealing with a TH1 or TH2 subset dominant autoimmunity. Knowing this will allow you to treat with the most appropriate herbs (of course, you can use drugs). You can call Apex Energetics and ask for Don Sing for help interpreting the test results. Don's not a doctor but he knows these panels well. I call on him for help whenever I need it.

The big idea is that you will get the most impact out of treating the autoimmunity. Treating the thyroid itself has minimal impact in these cases.

p.s. Iodine and/or L-tyrosine are popular supplements for thyroid patients. Hashimoto's patients should not take these supplements however because they increase the attack and destruction of thyroid cells by the immune system.

Steve Zaeske, DC DABCI

# Hashimoto's Thyroiditis

A9: Selenium lowers thyroid antibodies. I would also give fish oil and check vitamin D levels, both nutrients which relate strongly to auto-immunity. Intestinal yersinia has been found commonly in auto-immune thyroid conditions. Also consider gluten intolerance. A person with hashimoto's has 10 x higher likelihood of having gluten intolerance. Lastly remove amalgams if he has any and irrespective of this chelate for mercury. If possibly I would consider some thyroid glandulars as well.

Best regards,  
Blake Graham, B.Sc (Honours)  
Clinical Nutritionist

# Hashimoto's Thyroiditis

A10: My guess is that he was born when your wife was over 26 years old and/or she had at least relative hypothyroidism during the pregnancy with him (reduction in libido, post partum depression, inability to lose weight after pregnancy and changes in the menstrual cycle all indicate pregnancy related hypothyroidism). If the tetanus shot was toxic due to its intrinsic, we would see more reactions like your son's. However in an immune compromised person that is born to a hypothyroid mother, anything that weakens the immune system can facilitate overgrowth of opportunistic infections. Candida is a common one, but there are certainly others that pile on like MRSA, EBV, herpes etc.

The histology of inflammation of Hashimoto's and Grave's is exactly the same. Biochemical production of mucin is the same in both diseases also. These links suggest a common etiologic agent. I treat both with antifungals with great results. Synthroid is rarely the best choice in thyroid replacement. However an endo who is not aware of this will not be convinced of it, especially not by a D.C. Get Mark Starr's Hypothyroidism Type 2 book. You must become the thyroid expert. Choose another doc for your son's best interest. Go to <[www.aboutthyroid.com](http://www.aboutthyroid.com)> to find a competent thyroid doctor in your area. The book Thyroid Solution by Baylor professor of endocrinology Ridha Arem M.D. will explain the psychiatric manifestations of hypothyroidism your son is experiencing. His condition is completely reversible.

Roby Mitchell M.D.(Dr Fitt)

drfitt@mac.com<[www.drfitt.com](http://www.drfitt.com)

# Hashimoto's Thyroiditis

A11: Scott~ The 1st thing I would do is get him off of synthroid. Armour is much better!!! But before I would put him on anything I would run the barnes test along with a saliva thyroid, (Diagnos-Tech's) is the lab I would recommend. Blood work is the least accurate test for thyroid activity. It doesn't matter the age I find 75-80% women & 65-70% males have weak thyroid. I do ALOT of Bio-Meridian testing & I can pick up thyroid cases off of that. I can't tell you the # of pt's. I've fixed with low thyroid & the results are amazing once you get the thyroid going on how it fixes stuck cases on the bio-meridian. What I have found works the BEST is Iodoral & thyrophin from standard process. With your sons size I would use 2-bid of Iodoral & 1-tid of thyrophin, if his thyroid shows weakness after barnes, saliva, & bio-meridian testing. Don't forget that the thyroid is connected to the pituitary, adrenals, & testes in his case & NEEDS to be supported also for results.

Good luck~ Dr. Matejka Any further questions call or email me at [drglen99@sbcglobal.net](mailto:drglen99@sbcglobal.net) or 815-455-4500

# Hashimoto's Thyroiditis

A12: Scott, you may want to do urine and hair analysis for metals. If his growth rate is abnormal for the family, check for a pituitary tumor (prolactin).

Depending upon the results, this is an autoimmune condition and often responds better to treatment as such rather than a "thyroid" condition.

There is evidence that iodine at this stage may make the condition worse (even though blood values improve). The symptoms you have listed can be related to his condition. I would certainly look at what changed in his environment before all this started. Full blood work is often ignored simply because practitioners are used to insurance. In addition to blood work for a pituitary tumor you may want (fasting) a CBC with diff, CMP, LH, CRP, HbA1c, lipids, iron, ferritin, ESR, t3, t4, t7, tsh, tpo all at once to see the relationships within the body. I have found a high correlation between Voll, AK and blood, but still like to see the diagnostic testing.

Roy Horn DC

# Hashimoto's Thyroiditis

A13: Sorry for your situation. 12 years old, 180 pounds and defiant must be difficult. Whatever the triggering event, he appears to have a cascading situation of abnormalities in both the immune system and neurohormonal systems. Though not likely a problem, I would drug test. The prognosis of lifetime synthroid is premature. The treatment of your son cannot be done from this one report but I would consider the following: thyroid -thyroid nutrients and iodine (any high quality manufacturer); immune - zinc, selenium, vit C, vit E, then I would consider a Myers followed by a glutathione IV then reassess.

Neurohormone - Your son seems to have a clinical picture of early depression - (Chinese -Hot) Agitated, probable high dopamine, high cortisol, high glutamate. You can test for cortisol levels. Treatment on neurohormonal basis could include tier 2 nutrient therapy to lower cortisol, increase serotonin, decrease norepinephrine, increase GABA and decrease inflammation such as taurine, GABA, theanine, inositol, MG++, B6, glutathione, vit D3, NAC, 5HTP, B12, 5-MTHF, DHA. Next you could consider the next tier of treatments using herbs (I know endocrinologist said no but I would consider depending on how things go) sam-e, holy basil, curcumin, rehmania, rhodiola, ashwaganda. Food ideally would be no cow dairy, no gluten, no nightshades. Probably avoid high tyrosine foods too eg bananas, meats, google them.

Hope this provides something for you to consider.

Mark Laursen MD

Sedona, AZ



# Hashimoto's Thyroiditis

A14: Dear Dr Close,

Please inform yourself about iodine. Many of your son's symptoms including the Hashimoto's are signs of severe iodine deficiency. You may find a lot of information at the following sites [www.drbrownstein.com](http://www.drbrownstein.com) I recommend his book on Iodine, 3rd edition most highly, and the DVD; although the sound quality on the DVD isn't good, the message is of vital importance.

[www.helpmythyroid.com/iodine.htm](http://www.helpmythyroid.com/iodine.htm) Here you will find a 24-hr urine test that will accurately measure his whole body iodine status. There are receptors for iodine on all cells in the body and I don't think they are there for decoration.

[www.quackcenter.com/iodoral.html](http://www.quackcenter.com/iodoral.html) This is my site where I have collected a lot of information, update frequently, and have posted a lot of feedback and questions from customers.

Standard Process makes a product called Prolamine Iodine. Some people love it, and my friend Dr. William Schlee swears by it, but it didn't do a thing for me.

Regards,

Nancy Adams, LMT

# Hashimoto's Thyroiditis

A15: Dr. Close: As a Mental Health Counselor and Biofeedback Clinician I have had to separate mood disorders from physical illness, frequently following extensive negative medical evaluation. As you know, teenage mood disorder of any variety is a serious thing and psychiatric antidepressants can sometimes trigger more problems in vulnerable individuals. Thus, while you search for a cause, as a priority find a like minded counselor so as to establish a grounding therapeutic relationship during treatment. This is especially needed if there is any family related mental illness such as Bipolar depression, etc. on either side (mother especially).

Charles G. Jacques III LPC, BCIA

A16: Dr. Close:

Can you provide some more information about your son please? I am wondering about the event that led to the tetanus toxoid injection. Was there an injury to the face or teeth? What dental work has your son had, and when? Also, have you spoken with a homeopath regarding the unusual behavior and sudden onset of symptoms? Interesting cross reference in B/T's Materia Medica w/Repertory.

Cecilia Castiglione

ccastig@aol.com

# Hashimoto's Thyroiditis

A17: This sounds similar to a recent episode on the T.V. show "House". The young son and daughter were indirectly in contact with the father who was taking steroids for his maleness. The children were adversely affected by the steroids, changing their young libidos, emotional attitudes, and sexual characteristics. Keep looking; this may be a clue somehow....

Michael Frank, D.C.

A18: interesting set of problems. would add to the testing: free t3, free t4 and follow on the followup with the synthroid, would also get reverse t3. maybe it will be ok to consider l-carnitine and selenium and not bother the doctor since these are not herbs.

A19: Check iodine levels, Armour thyroid has both T3 and T4 which many times is more effective.

# Iodine - YES OR NO?

## There are no 'text book' patients!!

- Experts:
  - Hyper thyroid including Graves' - yes and no
  - Hypo thyroid including Hashimoto's - yes and no
- What does Dr. Merkle say about use of Iodine?
  - Test, test and test some more.
  - If Iodine is high in the hair - do not recommend Iodine.
  - If Iodine is low in the hair then use Iodine even if Graves' or Hashimoto's.
    - **BUT TEST TO MONITOR THE THYROID: at least TSH, T4 and T3 Free.**
    - No Iodine if thyroid cancer.
  - When Iodine is used the TSH will often increase for a few weeks till the new thyroid Iodine and function improves, then it will go down. **Be patient and don't panic.**

# Thyroid Synopsis and main things to test

- **TSH:** Reflects the blood level of thyroid stimulating hormone.
- **Total T4:** Reflects the total amount of T4 present in the blood, i.e., the protein bound (unavailable) T4 and the Free T4. Note that high levels of estrogens (birth control pills or pregnancy) can increase the amount of the protein that binds T4; giving misleading elevated Total T4 values which can look like 'hyperthyroidism' when it is not.
- **Total T3:** Reflects the total amount of T3 present in the blood, i.e., the protein bound (unavailable) T3 as well as the Free T3. Again, high estrogen levels create the same effect as mentioned in relationship to T4 above.
- **Free T4:** Reflects the biologically active (free) form of T4. This T4 can be converted to T3 or RT3. In the presence of elevated estrogen levels, the Free T4 gives a more accurate assessment of thyroid function.
- **Free T3:** Reflects the biologically active (free) form of T3 that can generate production of energy (in the form of ATP). In the presence of elevated estrogen levels, the free T3 gives a more accurate assessment of thyroid function.

# Reverse T3

- Reverse T3 (rT3) is considered inactive, and it is from the conversion of T4 into rT3, which reduces the amount of T4 available for conversion to biologically active T3.
- Reverse T3 does not slow thyroid function directly but it does reduce Free T3 availability and competes with Free T3 at the cellular level, thereby, lowering thyroid function.
- Significant changes in rT3 can occur rapidly in acute illness. **The elevated rT3 may be associated with a poor global health status.** Reverse T3 is often increased in nonacute ill elderly people. This might also be due to the effects of using thyroid medications. **Resolving other health issues or modifications to medications are the first areas to consider.**
- Elevated Serum rT3 are seen in acute and chronic nonthyroidal illnesses, calorie deprivation, chemicals and drugs



# Thyroglobulin Antibodies (Tg Ab)

- The Thyroglobulin Antibodies (Tg Ab).
- **Thyroglobulin helps with the production of T4 and T3 but the Thyroglobulin Antibodies halt or slow this process.** Thyroglobulin Antibodies can be seen in both Grave's disease and Hashimoto's disease, however the level of Thyroglobulin Antibodies does not always correlate with the severity of disease.
- Check for: Infection, low protein, inflammation, high Ferritin, Hemochromatosis, high heavy metals, liver function

# Thyroid Peroxidase Antibodies (TPO Ab)

- The Thyroid Peroxidase Antibodies (TPO Ab)
  - **TPO helps with the conversion of T4 into the more active thyroid hormone T3. Anti-TPO antibodies target the TPO enzymes slowing or stopping this necessary activity resulting or causing lower thyroid function.** Having anti-TPO antibodies does not necessarily mean one has thyroid disease. TPO antibodies are seen in nearly all patients with Hashimoto's thyroiditis and 70 percent of patients with Graves' disease. TPO antibodies can also indicate a chronic inflammatory disease, like rheumatoid arthritis, Hemochromatosis are present. People with Addison's disease (low adrenal gland hormones), celiac disease (gluten intolerance), primary biliary cirrhosis, pernicious anemia, Sjogren's, systemic lupus erythematosus, type 1 diabetes or alopecia areata (an autoimmune reaction which causes baldness) can also have anti-TPO antibodies. These test results would be common with Hashimoto's disease. **Sometimes the level of TPO Antibodies does not correlate with the severity of disease.**
- Check for: Infection, low protein, inflammation, high Ferritin, Hemochromatosis, high heavy metals, liver function

# Conversion of T4 into T3 Free

- Regardless of the source of T4 (natural T4 or Synthroid T4), the T4 has to be converted into the more active T3 Free.
- Most of the conversion occurs in the GI tract, liver and kidneys
- **Therefore, an optimal T4 and TSH could still have true low thyroid function** if there is a problem with the conversion process.
- **This is why Armor Thyroid medication might be more effective for some people because Armour has both T4 and T3.**

# Magnesium and Thyroid

- The thyroid cannot function without magnesium.
- Magnesium is responsible for converting the inactive T4 thyroid hormone into the active form of T3. This is extremely important because the metabolism of your body cells are enhanced by T3, not inactive T4.
- Magnesium deficiency is related to goiter, or an enlarged thyroid gland. Another important nutrient in preventing goiter is iodine, but magnesium is right there helping too.
- Magnesium helps you to make more T4 in the thyroid gland. Without magnesium, many of the thyroid enzymes that make thyroid hormone simply could not function.

# Low Magnesium and Hashimoto's

- **Magnesium and Thyroid Health.** Low **magnesium** levels are associated with thyroglobulin antibody (TGAb) positivity, Hashimoto's thyroiditis, and hypothyroidism. A **magnesium** deficiency can put those with Hashimoto's at a higher risk of developing symptoms. ... Lifestyle changes can result in improved **thyroid function and/or** an increased magnesium supplementation.

[https://thyroidpharmacist.com › articles › new-studies-on-magnesium-and-thyroid-health](https://thyroidpharmacist.com/articles/new-studies-on-magnesium-and-thyroid-health) April 29, 2022

[Studies on Magnesium and Thyroid Health - Dr. Izabella Wentz](#)

# The Benefits of Magnesium on the Thyroid and conversion of T4 into T3 Free

- **Magnesium** stimulates the **thyroid** gland to produce more T4 and simultaneously changes T4 into T3



# Drugs That Alter Thyroid Function

- Dopamine
- Glucocorticoids
- Octreotide
- Lithium
- Iodide
- Amiodarone
- Aminoglutethimide
- Colestipol
- Cholestyramine
- Nicotinic acid
- Furosemide
- Fenclofenac
- Mefenamic acid
- Salicylates (salicylic acid: A common component of aspirin and a preservative)
- Aluminum hydroxide
- Ferrous sulfate
- Sucralfate
- Estrogens
- Testosterone
- Tamoxifen
- Heroin
- Methadone
- Mitotane
- Fluorouracil
- Androgens
- Anabolic steroids
- Corticosteroids
- Phenobarbital
- Rifampin
- Phenytoin
- Tegretol

# Conditions Associated With Hypothyroidism

- Mild anemia
- Low selenium
- Low copper
- Low iodine
- Low zinc
- **High chloride**
- **High fluoride**
- **High Bromine**
- **Hemochromatosis**
- **High Ferritin**
- Low phosphorus
- High calcium
- High magnesium
- Low potassium
- Low globulin
- Low protein- **What is the primary reason for low protein today?**

# Soy is Bad

- Soy contains goitrogens - substances that depress thyroid function. In 1997, researchers from the FDA's National Center for Toxicological Research made the embarrassing discovery that the goitrogenic components of soy were the very same isoflavones. Divi, R.L. et al., "Anti-thyroid isoflavones from the soybean." Biochemical Pharmacology (1997) 54:1087-1096.

# Soy is Bad

- In 1991, Japanese researchers reported that consumption of as little as 30 grams or **two tablespoons of soybeans per day for only one month resulted in a significant increase in thyroid-stimulating hormone (TSH)**. Diffuse goiter and hypothyroidism appeared in some of the subjects and many complained of constipation, fatigue and lethargy, even though their intake of iodine was adequate.
- *If thyroid function is lowered by soy then the pituitary tries to stimulate more thyroid function hence, the elevated TSH.*
  - Dr. Merkle

# Soy is Bad

- An April 2000 study published in *Carcinogenesis* found that soy feeding stimulated the growth of a rat's thyroid even with iodine deficiency. This was partly through a pituitary-dependent pathway.

# Soy is Bad

- 25 grams of soy protein isolate, the minimum amount claimed to have cholesterol-lowering effects, contains from 50 to 70 mg of isoflavones. It took only 45 mg of isoflavones in premenopausal women to exert significant biological effects, including a reduction in hormones needed for adequate thyroid function. **These effects lingered for three months after soy consumption was discontinued.** Cassidy, A. et al., "Biological Effects of a Diet of Soy Protein Rich in Isoflavones on the Menstrual Cycle of Premenopausal Women",  
- *American Journal of Clinical Nutrition* (1994) 60:333-340.



# Soy is Bad

- High soy consumers and users of isoflavone supplements are at risk of thyroid disorders. The subtle effects of anti-thyroid agents such as soy on thyroid function would most likely be evidenced as subclinical, or even overt hypothyroidism.

- *New Zealand Medical Journal* (Volume 113, Feb 11, 2000)

# 42 Year Old Female

- Early menopausal, headaches, hot flashes, mood swings, malaise, fatigue, and a long history of low thyroid, complete blood test and program for 6 months...minimal help.
- Soy protein drink for breakfast and sometimes lunch, 2 protein bars a day (soy), and genestein from the health food store for her hormone problems.
- 2 weeks after we took off all soy her symptoms disappeared.

# Pass the Salt Please

- More thyroid problems since the salt phobias in the last 20 years.
- Iodized salt is a good source of iodine.
- Iodine competes with fluorine and chlorine.
- Is patient on a salt restricted diet.
- Sometimes dramatic results in thyroid function with just adding iodized salt.

# Foods That Block Iodine Utilization (Goitrogens)

- Raw turnips
- Kale
- Brussels sprouts
- Cauliflower
- Spinach
- Turnips
- Cabbage
- Peanuts
- **Cooking deactivates Goitrogens**

# Adverse Effects of Iodine Supplementation

- Iodine induced hyperthyroidism
- Iodine induced goiter
- Iodism: iodine poisoning marked by severe coryza (allergy symptoms) not limited to:
  - Acneiform eruption mostly seborrheic areas
  - Headache originating in the frontal sinuses
  - Sneezing
  - Weakness
  - Salivation
  - Foul breath (unpleasant brassy taste)

# Iodine Induced Hyperthyroidism

- Is an iodine deficiency disorder
  - Iodine deficiency increases thyrocyte proliferation and mutation rates resulting in hyperfunctioning autonomous nodules in the thyroid...and hyperthyroidism after iodine supplementation
- Predisposing factors:
  - Treated graves' disease
  - Hashimoto's thyroiditis
  - Post-partum lymphocytic thyroiditis
  - Subacute painful thyroiditis
  - Lobectomy for benign nodules



# Iodine Properties Cont.

- Iodine is an essential element for breast normality and for protection against fibrocystic disease of the breast and breast cancer
- ~7.5mg/day of iodine
  - *Breast cancer and iodine by Derry D*

# With Elevated T4 and T3 Consider

- **L-Carnitine 2-4 grams**
- Iodine
- Liver (check for elevated SGPT)
- Eat (raw) : rutabaga, cauliflower, brussel sprouts, cabbage, kale, sauerkraut

# With decreased T4, T3 and Elevated TSH Consider

- Raw thyroid
- Tyrosine
- Vitamin D
- Iodine- check hair
- Selenium- check hair
- **Exercise- moderate intense**
- *Avoid:*
  - Soybeans, rutabaga, cauliflower, brussel sprouts, cabbage, kale, sauerkraut

# Ticket 7-23-2021 Thyroid Pt from SBN member

Comment:

Hi Dr. Merkle. I am needing your help ASAP. I'm working w/a patient whom has hypothyroidism, been Dx Hashimoto's, and recently **stopped her thyroid med in May, feeling that it wasn't working.** She has since just started it again in the last couple of weeks due feeling awful. She did labs w/me for the 1st time on 7/9/21, but had done some w/her MD 3/26/21. She was still dealing w/a lot of issues then, but nothing like what I'm seeing now. Some test weren't done w/her MD, so I don't know if these worsened since then, but now they are severe and I'm concerned about kidney & liver damage. She's been taking probiotics, vit D, thyroid support, vit Bs, HCL, digestive enzymes, folate, Mg+ & biotin. She started up Keto again in Jan, but was feeling awful on it, so stopped eventually. We increased her Bs at this time and it helped her energy at that time. **She has continued to feel worse & worse, so then started the levothyroxine again.** Unfortunately, I don't see her as regularly as I'd like, so I was unaware of this and it took her a couple of weeks to get her labs done. I feel she's at a critical state, and I need your help. I understand you are out of state right now, but I would love to have a conversation about this rather than simply have you write back. Please feel free to call me on my cell phone @ 707-774-5232. I'm on PST, and I'm available outside of the following times (my work hours): Mon & Wed 8-6 (though I am available during my lunch from 1-2), Tue/Thurs 2-7 & Fri 8-1. If you need to call during these times, it's unlikely I'll be available, but you could try. My office # is XXXXXXXXXXXX.

# 7-23-2021 Ticket for Thyroid pt.

## DR. Merkle's response:

- this pt needs to see an MD asap.
- most of this could be due to thyroid. she needs to be on thyroid medication asap. if she is on thyroid medication, it either isn't high enough dose or it is not effective. **Nutritional support will not be enough** or fast enough to take care of this extreme thyroid problem.
- always run a T3 Free with any thyroid study and the TPO Ab and Tg Ab should have also been run but at this time, a referral is the best and really only option.
- If she stopped her thyroid medication in May 2021 and just now retested of 7-09-2021 (which was 2 weeks ago), that is very bad that she didn't get tested/monitored sooner.
- remember, during the SBN lecture, I talk about how Synthroid is a rather 'safe' drug with few side effects and that it is very difficult to take someone off of Synthroid without frequent testing and even then only a 25% or so reduction in Synthroid should be tried for a week or 2 and then retest at least the TSH and T4 and T3 Free.
- let me know what happens but contact this patient directly and have them go to their MD or Emergency Room if she can't get in to her MD. send her a copy of the actual Labcorp form, which you can download where the reports are stored.
- let me know.
- Van

# 7-23-2021 Thyroid pt. from SBN member

Julie Restad

replied on 7/23/21 at 5:56 PM

Hi Dr. Merkle. Thank you for the quick response. Yes, I called the patient at 8am & recommended she get into her MD ASAP & tell them about her labs. **She called her MD & they refused to see her until Monday.** The patient doesn't want to go to the ER, though I did recommend that for faster help. She feels her MD's office is not handling her case well & that's why she's been seeking my help. **I did not recommend her to stop her levothyroxine, I recommended against it, but she wanted to, so I supported her.** She is back on it, but looks like only as of 7/13 & the tests were done before on 7/9.

Should I have her take anything to naturally support the liver, like SP Milk Thistle 1:1? I was also thinking livaplex & hepatrophin. I told her to reduce her fat & protein for now to take load off of the kidneys & liver. I spoke w/her at length yesterday, trying to get more info. She's still urinating a lot, w/a strong & fast stream. Hydrating a lot. She doesn't have any kidney or liver pain. Her energy has been improving, but depends on the day, as she has a lot of depression & anxiety. She's pretty self aware & prefers a natural approach.

I will keep you updated. Thanks again for your help. I appreciate your calls, unfortunately I was still sleeping. I would still love to speak to you if you feel it's helpful.

Thanks,

Julie

Van Merkle

replied on 7/23/21 at 11:13 PM

**I am going to be cautious and I would not have the patient take the vitamins for the liver that you mentioned.** **I do not want her thinking that if she feels a little better that she is OK>** Less is recommended. just have her do the Synthroid till she see her MD.

**This could have gone bad quickly and she needs a blood test now to see if she is still getting worse.** do at least a TSH and T4 tomorrow if at all possible. those need to be improving.

Good luck,

Van



Alk. Phosphatase	99.000	high	84.000	⊖	64.740 - 91.260	39.000 - 117.000	IU/L
Creatine Kinase	359.000	Very High			81.500 - 132.500	32.000 - 182.000	U/L
LDH	296.000	Very High			138.880 - 190.700	119.000 - 226.000	IU/L
SGOT (AST)	63.000	High			10.000 - 26.000	0.000 - 40.000	IU/L
SGPT (ALT)	71.000	Very High			8.000 - 26.000	0.000 - 32.000	IU/L
GGT (r-GTP)	15.000	★			10.000 - 35.000	0.000 - 60.000	IU/L
Serum Iron	75.000	★			71.000 - 115.000	27.000 - 159.000	ug/dL
Ferritin	107.000	★			45.000 - 110.000	15.000 - 150.000	NG/ML
Total Cholesterol	379.000	Very High	255.000	⊖	150.000 - 180.000	100.000 - 199.000	mg/dL
Triglyceride	121.000	★	76.000		50.000 - 150.000	0.000 - 200.000	mg/dL
HDL Cholesterol	80.000	★	64.000		50.000 - 150.000	40.000 - 200.000	mg/dL
VLDL Cholesterol	21.000	high	15.000	⊖	6.000 - 20.000	5.000 - 40.000	mg/dL
LDL Cholesterol	278.000	Very High	176.000	⊖	50.000 - 75.000	0.000 - 99.000	mg/dL
Total Cholesterol / HDL Ratio	4.700	High	4.000	⊖	0.000 - 4.000	0.000 - 4.400	ratio
TSH	246.000	Very High	6.520	⊖	0.500 - 3.500	0.450 - 4.500	uIU/mL
T4 Thyroxine	1.200	Very Low			7.100 - 9.000	4.500 - 12.000	ug/dL
T3 Uptake	14.000	Very Low			29.000 - 35.000	24.000 - 39.000	%
T7 (Free T4 Index) (FTI)	0.200	Very Low			2.610 - 3.600	1.200 - 4.900	
T4, Free (Direct) Thyroxine			1.340		1.000 - 1.500	0.820 - 1.770	ng/dL
T3 Free (Triiodothyronine)			2.000		2.600 - 3.800	2.000 - 4.400	pg/mL
Thyroid Peroxidase (TPO) Ab (antibodies)			41.000		0.000 - 9.000	0.000 - 34.000	IU/ML
Thyroglobulin AB (Antibody)			119.000		0.000 - 1.010	0.000 - 1.100	IU/ML

# Myxedema- extreme low thyroid

- **Myxedema coma is a rare fatal condition** as a result of long-standing hypothyroidism with loss of the adaptive mechanism to maintain homeostasis. Hypothyroidism due to any cause, including autoimmune disease, iodine deficiency, congenital abnormalities, or medications like lithium and amiodarone, can precipitate myxedema coma if left untreated. Even with early diagnosis and treatment of myxedema coma, the mortality rate is variable, with some reports as high as 60% and others as low as 20 to 25% in the presence of advanced intensive support care. Early recognition, with a thorough history and physical exam, and early treatment is paramount for myxedema coma. **History of any thyroid dysfunction, thyroid medication, adherence with thyroid medication, thyroid surgery, and history of any drugs that may affect thyroid function** require assessment in any patient suspected myxedema coma.
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# What are the symptoms of myxedema?

- In addition to skin changes, other signs and symptoms of severe hypothyroidism can include:
- low blood pressure
- Decreased breathing
- low heart rate
- sparse or brittle hair
- cold intolerance
- goiter (enlargement of the thyroid gland)
- low energy and lethargy
- weight gain
- weakness
- cold intolerance
- constipation
- depressed mood

# Signs of Hypothyroidism

- Feeling tired, cold, dry skin, weight gain, slow heart, puffy face, and constipation.
- Not taking the medication or the dose being too low can cause hypothyroidism.

# What are the symptoms of myxedema crisis?

- Myxedema crisis occurs when your body can no longer tolerate the changes caused by severe hypothyroidism, so it decompensates. This is a life-threatening state that requires immediate medical attention. Along with the signs and symptoms of severe hypothyroidism, symptoms of myxedema crisis can include:
- decreased breathing (respiratory depression)
- lower than normal blood sodium levels
- hypothermia (low body temperature)
- confusion or mental slowness
- shock
- low blood oxygen levels
- high blood carbon dioxide levels
- coma
- seizures
- Myxedema crisis can cause death often due to complications from infection, bleeding, or respiratory failure. It's more common in women and people over the age of 60. It can occur during pregnancy as well.

# Main point about thyroid:

- Don't stop or have patient change thyroid medication without proper guidance.
- If thyroid medication is stopped, the symptoms will often take several days or weeks to become advanced enough to consider.
- Synthroid is a rather 'safe' drug.



# Actual case: The TSH is very low, the Reverse T3 is high, and the T4, T3 Uptake, T7, and T3 Free are optimal.

- Thyroid function appears optimal due to the level of T3 Free, which is the most active thyroid hormone but thyroid function will likely trend lower because Reverse T3 is high. These findings could be due to use of thyroid or other medication, which would cause the TSH to go low.
- Reverse triiodothyronine (rT3) has no demonstrated biological activity. Multiple changes in serum thyroid hormone levels are commonly observed in secondary systemic nonthyroidal illnesses. Studies have shown that increased rT3 and shorter survival occur while taking into consideration other factors such as age, gender, medical history, nutritional parameters, and energy intake. Basically, T3 levels might be close to normal but most of the T3 is in the inactive form of Reverse T3 rather than the active T3 Free resulting in low thyroid symptoms. Currently the T3 Free is optimal but will probably trend lower leading to lower thyroid function.
- If thyroid symptoms are present then further testing and retesting is indicated. The thyroid gland controls your basal metabolic rate. This is the rate at which your body heals and repairs itself. It also determines how fast chemical reactions occur in the body. With a low-functioning thyroid, your immune system is going to be low, digestion is going to be slow and energy will be reduced. It is difficult to have a good cholesterol level with a low functioning thyroid. Large amounts of cauliflower, sauerkraut (cabbage), and asparagus do lower thyroid function; so do not eat these foods more than a couple of times per week. Note: poor digestion, low vitamin D, low protein, lack of exercise, infection, inflammation, liver and kidney dysfunction, deficiencies of minerals and vitamins as well as exposure to toxic elements and chemicals can cause or contribute to thyroid dysfunction. Reducing or eliminating glutens and refined sugar might be of benefit. Steroids and hormone replacement therapy and other drugs can also alter thyroid function. Use of nutrients to support the thyroid and changes in diet can change thyroid function can alter the need or dosage of medications. Improving diet and correcting the problems mentioned above might have the best effect. Interestingly, most cancers are seen in people with low thyroid function. IB

# Actual Case: The Thyroglobulin IMA is very high, the T3 Total and T4 Free are a little low, and the TSH, Thyroid Peroxidase Antibodies (TPO Ab), and Thyroglobulin Antibodies (Tg Ab) are optimal.

- The Thyroglobulin IMA is very high, the T3 Total and T4 Free are a little low, and the TSH, Thyroid Peroxidase Antibodies (TPO Ab), and Thyroglobulin Antibodies (Tg Ab) are optimal. These findings could be due to thyroid or other medications. Regardless, the thyroid metabolism appears a little low due to the level of T3 Total. TSH stimulates the thyroid to produce more hormones. This level of TSH should stimulate the thyroid to produce sufficient T4 Free and T3 Total but the thyroid is not responding properly.
- Thyroglobulin IMA in blood, is an important laboratory test for checking whether a patient still has natural thyroid function. The power of a serum Tg measurement lies in the fact that Tg can only be made by the thyroid gland (either the remaining normal part or the tumorous part). This means that when a patient has had their thyroid completely removed, the measurement of Tg in a blood sample can be used to check whether there is any tumor left behind. A low or very low level of Tg IMA would indicate that there is very little natural thyroid function.
- Note: A very high Tg IMA might indicate thyroid cancer (particularly papillary or follicular thyroid cancer). A referral is recommended and retesting is indicated to verify and determine course of treatment.
- If thyroid symptoms are present then further testing and retesting is indicated. The thyroid gland controls your basal metabolic rate. This is the rate at which your body heals and repairs itself. It also determines how fast chemical reactions occur in the body. With a low-functioning thyroid, your immune system is going to be low, digestion is going to be slow and energy will be reduced. It is difficult to have a good cholesterol level with a low functioning thyroid. Large amounts of cauliflower, sauerkraut (cabbage), and asparagus do lower thyroid function; so do not eat these foods more than a couple of times per week. Note: poor digestion, low vitamin D, low protein, lack of exercise, infection, inflammation, liver and kidney dysfunction, deficiencies of minerals and vitamins as well as exposure to toxic elements and chemicals can cause or contribute to thyroid dysfunction. Use of nutrients to support the thyroid and changes in diet can change thyroid function can alter the need or dosage of medications. Improving diet and correcting the problems mentioned above might have the best effect. Interestingly, most cancers are seen in people with low thyroid function. T.5IB

# Actual Case:

The Thyroid gland function has been removed by either surgery or radiation and special consideration needs to be made. Thyroid medication must be used. The T7, T3 Uptake, T3 Total, and T3 Free are a little low and the TSH, T4, T4 Free, Thyroid Peroxidase Antibodies (TPO Ab), Thyroglobulin Antibodies (Tg Ab), and Reverse T3 are optimal.

- The thyroid metabolism appears a little low due to the level of T3 Free which is the most active thyroid hormone and thyroid function will likely trend lower. Most thyroid medications are T4, though some are T3. Regardless of the source, this T4 needs to be converted into the more active T3 Free hormone. There appears to be a mild hindrance to this conversion process and most of the conversion occurs in the liver, kidneys and GI tract.
- Since the thyroid gland has been removed and thyroid medication is being used the TSH should be low or even very low. The TSH being optimal in this case indicates that true thyroid function is at least a little low and will likely go lower.
- Note: if there is a history of thyroid cancer the TSH needs to be low or very low. It is thought that TSH stimulates the growth of thyroid cancer, in which case an increase in thyroid support medication might be of benefit and a Thyroglobulin test needs to be done if there is a history of thyroid cancer.
- Symptoms of low thyroid functions include fatigue, digestive problems, sensitivity to cold, heart problems including slow pulse, abnormal heartbeats and weakened pulse, nerve damage, infertility in men and women; and menstrual irregularities.
- Poor digestion, low vitamin D, low protein, lack of exercise, infection, inflammation, liver and kidney dysfunction, deficiencies of minerals and vitamins as well as exposure to toxic elements and chemicals can cause or contribute to thyroid dysfunction.
- Caution for post thyroidectomy: the most frequent complication occurring in 20-50% of patients is inadvertent devascularization, nerve damage or removal of the parathyroid glands leading to hypocalcemia and the need for calcium and vitamin D supplementation. However, a low PTH (Parathyroid Hormone) value does not always cause hypocalcemia nor does a normal PTH value guarantee normocalcemia. Regular testing of calcium and vitamin D would be required if such is the case.
- Use of nutrients to support the thyroid need to be carefully considered and possibly avoided so that they won't interfere with the thyroid medication. Modification of thyroid support medication might be needed and a referral to a thyroid specialist is encouraged if there is a history of thyroid cancer.

# Actual Case: The TSH is very high and the T7 is low, the T3 Total, T3 Uptake, and T4 are a little low.

- These findings could be due to thyroid or other medications. Regardless, the thyroid metabolism appears a little low due to the level of T3 Total. The TSH will commonly elevate when thyroid function is low and the TSH stimulates the thyroid to produce more hormones. This level of TSH should stimulate the thyroid to produce sufficient T4 and T3 Total but the thyroid is not responding properly.
- If thyroid symptoms are present then further testing and retesting is indicated. The thyroid gland controls your basal metabolic rate. This is the rate at which your body heals and repairs itself. It also determines how fast chemical reactions occur in the body. With a low-functioning thyroid, your immune system is going to be low, digestion is going to be slow and energy will be reduced. It is difficult to have a good cholesterol level with a low functioning thyroid. Large amounts of cauliflower, sauerkraut (cabbage), and asparagus do lower thyroid function; so do not eat these foods more than a couple of times per week. Note: poor digestion, low vitamin D, low protein, lack of exercise, infection, inflammation, liver and kidney dysfunction, deficiencies of minerals and vitamins as well as exposure to toxic elements and chemicals can cause or contribute to thyroid dysfunction. Use of nutrients to support the thyroid and changes in diet can change thyroid function can alter the need or dosage of medications. Improving diet and correcting the problems mentioned above might have the best effect. Interestingly, most cancers are seen in people with low thyroid function. T2

# Actual Case:

The TSH is very low, the T3 Free is high, the Thyroid Peroxidase Antibodies (TPO Ab), T4 Free, and T4 are a little high, and the T3 Uptake, T7, and Thyroglobulin Antibodies (Tg Ab) are optimal.

- These test results could be due to the use of thyroid support medication, which would cause the TSH to go low. The thyroid metabolism is high due to the level of T3 Free, which is the most active thyroid hormone but thyroid function will likely trend lower. If thyroid medication is being used, it is most likely T3 Free based and the dosage might need modified.
- Among other things, TSH stimulates Thyroid Peroxidase (TPO). TPO helps with the conversion of T4 into the more active thyroid hormone T3. Anti-TPO antibodies target the TPO enzymes slowing or stopping this necessary activity resulting or causing lower thyroid function. Having anti-TPO antibodies does not necessarily mean one has thyroid disease. TPO antibodies are seen in nearly all patients with Hashimoto's thyroiditis and 70 percent of patients with Graves' disease. TPO antibodies can also indicate a chronic inflammatory disease, like rheumatoid arthritis, is present. People with Addison's disease (low adrenal gland hormones), celiac disease (gluten intolerance), primary biliary cirrhosis, pernicious anemia, Sjogren's, systemic lupus erythematosus, type 1 diabetes or alopecia areata (an autoimmune reaction which causes baldness) can also have anti-TPO antibodies. These test results would be common with Hashimoto's disease. Sometimes the level of TPO Antibodies does not correlate with the severity of disease.
- If thyroid symptoms are present then further testing and retesting is indicated. The thyroid gland controls your basal metabolic rate. This is the rate at which your body heals and repairs itself. It also determines how fast chemical reactions occur in the body. With a low-functioning thyroid, your immune system is going to be low, digestion is going to be slow and energy will be reduced. It is difficult to have a good cholesterol level with a low functioning thyroid. Large amounts of cauliflower, sauerkraut (cabbage), and asparagus do lower thyroid function; so do not eat these foods more than a couple of times per week. Note: poor digestion, low vitamin D, low protein, lack of exercise, infection, inflammation, liver and kidney dysfunction, deficiencies of minerals and vitamins as well as exposure to toxic elements and chemicals can cause or contribute to thyroid dysfunction. Eliminating glutens and reducing refined sugar has been shown to be beneficial for cases of Hashimoto's. High Ferritin has been seen to be associated with elevated TPO Ab. **Steroids and hormone replacement therapy and other drugs can alter thyroid function.** Use of nutrients to support the thyroid and changes in diet can change thyroid function can alter the need or dosage of medications. Improving diet and correcting the problems mentioned above might have the best effect. Interestingly, most cancers are seen in people with low thyroid function. IB



# Actual Case: The TSH is very high, the T7 and T3 Uptake are low, and the T4 is a little low. The patient is on Levothyroxine (What about T3 Free?)

- The TSH is very high, the T7 and T3 Uptake are low, and the T4 is a little low. The patient is on Levothyroxine (synthetic T4), which is indicated for treatment of hypothyroidism. The T4 should be higher in this case due to the Levothyroxine. The thyroid metabolism appears a little low due to the level of T4. **This level of TSH should stimulate the thyroid to produce sufficient T4 but the thyroid is not responding properly. Since Levothyroxine is being used, either the dose is insufficient or the body is not responding. Levothyroxine should cause the TSH to go low or very low.**
- If thyroid symptoms are present then further testing and retesting is indicated. The thyroid gland controls your basal metabolic rate. This is the rate at which your body heals and repairs itself. It also determines how fast chemical reactions occur in the body. With a low-functioning thyroid, your immune system is going to be low, digestion is going to be slow and energy will be reduced. It is difficult to have a good cholesterol level with a low functioning thyroid. Large amounts of cauliflower, sauerkraut (cabbage), and asparagus do lower thyroid function; so do not eat these foods more than a couple of times per week. Note: poor digestion, low vitamin D, low protein, lack of exercise, infection, inflammation, liver and kidney dysfunction, deficiencies of minerals and vitamins as well as exposure to toxic elements and chemicals can cause or contribute to thyroid dysfunction. Use of nutrients to support the thyroid and changes in diet can change thyroid function can alter the need or dosage of medications. Improving diet and correcting the problems mentioned above might have the best effect. Interestingly, most cancers are seen in people with low thyroid function. T2



# **CRAZY Actual case: The Reverse T3 and T4 Free are low, the T3 Total is very low, the T4 is a little low, and the TSH and T3 Free are optimal.**

- The Reverse T3 and T4 Free are low, the T3 Total is very low, the T4 is a little low, and the TSH and T3 Free are optimal. These findings could be due to thyroid or other medications. Regardless, the thyroid metabolism is nearly ideal due to the level of T3 Free, which is the most active thyroid hormone.
- If thyroid symptoms are present then further testing and retesting is indicated. The thyroid gland controls your basal metabolic rate. This is the rate at which your body heals and repairs itself. It also determines how fast chemical reactions occur in the body. With a low-functioning thyroid, your immune system is going to be low, digestion is going to be slow and energy will be reduced. It is difficult to have a good cholesterol level with a low functioning thyroid. Large amounts of cauliflower, sauerkraut (cabbage), and asparagus do lower thyroid function; so do not eat these foods more than a couple of times per week. Note: poor digestion, low vitamin D, low protein, lack of exercise, infection, inflammation, liver and kidney dysfunction, deficiencies of minerals and vitamins as well as exposure to toxic elements and chemicals can cause or contribute to thyroid dysfunction. Use of nutrients to support the thyroid and changes in diet can change thyroid function can alter the need or dosage of medications. Improving diet and correcting the problems mentioned above might have the best effect. Interestingly, most cancers are seen in people with low thyroid function. No additional thyroid support is indicated at this time.

# Analytes and Data Points

- 1 Analyte will have 7 ranges: very low or very high; low or high, a little low or a little high or optimal.
- 2 analytes will have 14 possible combinations (Rules)
- 4 analytes will have 2,401 possible combinations (Rules)
- 10 analytes will have 282,475,249 possible combinations
- (10 Rule set) ex: TSH, T4, T4 Free, T3 Total, T3 Free, TPO Ab, TG Ab, Rt3, Thyroidectomy, Synthroid

# **Florida Chiropractic Physician Association**

## **Thyroid hormone factors and conditions and how to fix them**

**Presenter: Van D Merkle DC, DCBCN, DABCI**

August 5-7, 2022