Frank

Analysis based on lab test(s) from: 1/20/2011

Next recommended test date is: 4/21/2011

Bio-Clarity™ Essential Health Profile

Analysis for: Blood Test

Practitioner

Health Director, LLC
www.healthdirector.com

Table of Contents

How to read your reference ranges

You may notice the reference ranges on your report don't match the lab's reference ranges. That's because each variable in your test has a different reference range. For example, the uric acid range is different from the potassium range.

Your report ranks all of these differing ranges into one easy-to-read chart that contains four health zones where:

- Zero (0) marks the middle of the reference range and represents balance
- +50% = the high end of the reference range
- -50% = the low end of the reference range

Your four health zones are:

	Results 0-25% are in the healthy zone. Congratulations, you're doing well.
	Results 25-50% are in the early warning zone. While these values are still in the reference range, watch these areas because they're trending towards imbalance where symptoms could eventually show. Use this information as a prevention tool.
	Results 50-100% are in the high risk zone. Health conditions you may have could be due to these imbalances.
	Results over 100% are in the critical zone. Your body is screaming for attention here. Address all black areas immediately.

Sometimes, our reference ranges differ…

Generally, our reference ranges match the standard ranges from the lab testing companies. But when recent medical studies prove otherwise, we use other reference ranges.

For example, reference ranges like the one for Ultrasensitive TSH is based on the population of people in the U.S. But numerous studies prove 3 out of 10 people have thyroid problems. This greatly skews the range.

In the Colorado Prevalence Thyroid study, 40,000 people were monitored. Their results suggest the range for healthy people should be 1.1 to 2.5uIU/mL. This is the range we use. Some labs use a wider range of .5-5.5uIU/mL.

By using the more accurate 1.1 to 2.5 range, we determine what's healthy by comparing you to a healthy population - rather than basing "healthy" on a sick population.

Ok, let's get started with reading your report…

Biochemical Imbalances (High/Low Summary)

Frank
Male / Age: 66

Blood Test : 1/20/2011

This page summarizes your biggest imbalances, both in excess and deficiency. All results that have a % Imbalance greater than 25% are shown. Results greater than 50%, and therefore out of the reference range, are bolded. The % Imbalance measures how far each result is from the middle of the lab reference range. It is also a way to compare items that have different reference ranges. The original data from the lab company is shown on the right side. *See footnote for details and page 1 for a full explanation of the color ranges.

Low Results

	% Imbalance	Deficiency	Lab Result	Reference Range Low	Reference Range High
Ultra-Sensitive TSH	**-128%**		**0.01**	1.10	2.50
sGOT	-32%		18.00	12.00	45.00
Lymphocyte Count	-30%		1464.00	700.00	4500.00
Globulin	-27%		2.20	1.50	4.50
		-100% -75% -50% -25% 0%			

High Results

	% Imbalance	Excess	Lab Result	Reference Range Low	Reference Range High
Vitamin D,25-OH,D3	**62%**		**108.00**	32.00	100.00
GGT	**59%**		**43.00**	7.00	40.00
Anion Gap	**55%**		**18.50**	8.00	18.00
Glucose	**53%**		**100.00**	65.00	99.00
LDL	**53%**		**132.00**	62.00	130.00
Albumin	42%		4.70	3.50	4.80
Sodium	30%		143.00	135.00	145.00
Hemoglobin	28%		16.00	12.50	17.00
B.U.N.	26%		21.00	5.00	26.00
Hematocrit	26%		46.60	36.00	50.00
		0% 25% 50% 75% 100%			

For the full discussion of out-of-range results, see page 4.

For the alphabetical listing of all Blood Test results, see page 3.

0% is the middle of the reference range, which represents balance. +50% = high end of the reference range. -50% = low end of the reference range.

healthy zone 0-25% | early warning zone 25-50% | high risk zone 50-100% | critical zone >100%

Biochemical Imbalances (Complete Alphabetic)

Frank
Male / Age: 66

Blood Test : 1/20/2011

The "% Imbalance" measures how far the lab result is from the middle of the reference range. *See footnote for details.

		% Imbalance	Deficiency / Excess	Lab Result	Reference Range Low	Reference Range High
	A/G Ratio	24%		2.14	1.10	2.50
H	Albumin	42%		4.70	3.50	4.80
	Alkaline Phosphatase	-10%		79.00	25.00	160.00
H	**Anion Gap**	**55%**		**18.50**	8.00	18.00
H	B.U.N.	26%		21.00	5.00	26.00
	B.U.N./Creatinine Ratio	6%		16.67	6.00	25.00
	Basophil Count	-20%		61.00	0.00	200.00
	Basophils	0%		1.00	0.00	2.00
	Bilirubin, Total	5%		0.70	0.10	1.20
	Calcium	2%		9.60	8.50	10.60
	Chloride	23%		105.00	97.00	108.00
	Cholesterol	9%		211.00	140.00	260.00
	CO2	-17%		24.00	20.00	32.00
	Creatinine	16%		1.26	0.80	1.50
	Eosinophil Count	11%		244.00	0.00	400.00
	Eosinophils	7%		4.00	0.00	7.00
H	**GGT**	**59%**		**43.00**	7.00	40.00
L	Globulin	-27%		2.20	1.50	4.50
H	**Glucose**	**53%**		**100.00**	65.00	99.00
	HDL-Cholesterol	3%		55.00	34.00	74.00
H	Hematocrit	26%		46.60	36.00	50.00
H	Hemoglobin	28%		16.00	12.50	17.00
	Iron, Total	20%		120.00	40.00	155.00
H	**LDL**	**53%**		**132.00**	62.00	130.00
L	Lymphocyte Count	-30%		1464.00	700.00	4500.00
	Lymphocytes	-19%		24.00	14.00	46.00
	MCH	3%		30.71	27.00	34.00
	MCHC	8%		34.33	32.00	36.00
	MCV	2%		89.44	80.00	98.00
	Monocyte Count	7%		610.00	100.00	1000.00
	Monocytes	17%		10.00	4.00	13.00
	Neutrophil Count	-18%		3721.00	1800.00	7800.00
	Neutrophils	12%		61.00	40.00	74.00
	Potassium	9%		4.50	3.50	5.20
	Protein, Total	-14%		6.90	6.00	8.50
	R.B.C.	24%		5.21	4.10	5.60
L	sGOT	-32%		18.00	12.00	45.00
	sGPT	-1%		26.00	7.00	46.00
H	Sodium	30%		143.00	135.00	145.00
	Thyroxine (T4)	-3%		8.00	4.50	12.00
	Triglycerides	9%		122.00	10.00	199.00
L	**Ultra-Sensitive TSH**	**-128%**		**0.01**	1.10	2.50
	Uric Acid	0%		5.30	2.40	8.20
H	**Vitamin D,25-OH,D3**	**62%**		**108.00**	32.00	100.00
	W.B.C.	-18%		6.10	4.00	10.50
	Average Imbalance	**21%**	-50% -25% 0% 25% 50%			
	Direction of Imbalance	**Excess**				

0% is the middle of the reference range, which represents balance. +50% = high end of the reference range. -50% = low end of the reference range.

healthy zone 0-25% | early warning zone 25-50% | high risk zone 50-100% | critical zone >100%

Out-of-Range Results (Discussion)

Frank
Male / Age: 66

Blood Test : 1/20/2011

The following results are out-of-range (as reported by the lab), and should be carefully reviewed. The % Imbalance measures how far each result is from the middle of the lab reference range. It is also a way to compare items that have different reference ranges. The original data from the lab company is shown to the right. Where there are drugs or nutritional supplements that have a known adverse effect for the corresponding test result, it is listed. *see ALERT at bottom of the page.

Ultra-Sensitive TSH (-128% imbalance, Test result 0.01 with reference range of 1.10 to 2.50)

TSH, produced by the anterior pituitary gland, causes the release and distribution of stored thyroid hormones. When T4 and T3 are too high, TSH secretion decreases. When T4 and T3 are low, TSH secretion increases. Decreased levels of TSH are seen in hyperthyroidism and secondary and tertiary hypothyroidism.

Drugs which may have an adverse effect:
Anabolic Steroids, Corticosteroids

Vitamin D,25-OH,D3 (62% imbalance, Test result 108.00 with reference range of 32.00 to 100.00)

Vitamin D3, also known as cholecalciferol is a fat soluble nutrient that is primarily known for its role in the regulation of calcium and bone growth but it has been reported to be involved in numerous other biological processes including immune support. High readings may indicate over supplementation.

GGT (59% imbalance, Test result 43.00 with reference range of 7.00 to 40.00)

GGT is believed to be involved in the transport of amino acids and peptides into cells as well as glutathione metabolism. GGT is mainly found in liver cells and as such is extremely sensitive to alcohol use. Elevated levels may be found in liver disease, alcoholism, bile-duct obstruction, cholangitis, drug abuse, and in some cases excessive magnesium ingestion.

Drugs which may have an adverse effect:
Allopurinol, Carbamazepine, Chlorpropamide, Diclofenac, Diphenylhydantoin, Haloperidol, Ibuprofen, Methotrexate, Methyldopa, Ofloxacin, Phenobarbital, Phenytoin, Propoxyphene, Rifampin, Sildenafil, Tadalafil, Troleandomycin, Valproic Acid, Vardenafil

Anion Gap (55% imbalance, calculated from other measurements)

The anion gap is used to measure the concentration of cations (sodium and potassium) and the anions (chloride and CO2) in the extracellular fluid of the blood. Numerous clinical implications can be gathered from the Anion Gap. An increased measurement is associated with metabolic acidosis due to the overproduction of acids or severe dehydration.

Glucose (53% imbalance, Test result 100.00 with reference range of 65.00 to 99.00)

Glucose, formed by the digestion of carbohydrates and the conversion of glycogen by the liver, is the primary source of energy for most cells. Insulin, glucagon, thyroid hormone, liver enzymes, and adrenal hormones regulate it. It is elevated in diabetes, liver disease, obesity, pancreatitis, steroids, stress, or diet.

Drugs which may have an adverse effect:
Acetaminophen, Acetazolamide, ACTH, Albuterol, Amitriptyline, Arginine, Aspirin, Caffeine, Chlorpromazine, Chlorthalidone, Clonidine, Clopamide, Corticosteroids, Cortisone, Dextran, Diazoxide, Diphenylhydantoin, Estrogens, Ethacrynic Acid, Ethionamide, Furosemide, Gemfibrozil, Haloperidol, Hydralazine, Imipramine, Indomethacin, Isoproterenol, Levodopa, Levonorgestrel, Lithium Carbonate, Mercaptopurine, Methyldopa, Morphine, Nifedipine, Nitrofurantoin, Paraldehyde, Phenelzine, Phenylbutazone, Phenytoin, Polythiazide, Pravastatin, Prednisone, Protriptyline, Reserpine, Thiothixene

LDL (53% imbalance, Test result 132.00 with reference range of 62.00 to 130.00)

LDL is the cholesterol rich remnants of the lipid transport vehicle VLDL (very-low density lipoproteins). There have been many studies showing correlations between high levels of LDL and arterial artherosclerosis. Due to the expense of direct LDL measurement, a calculation known as the Friedewald formula is used (Total Cholesterol - HDL Cholesterol - Triglycerides/5). When Triglyceride levels are greater than 400, this method is not accurate. Increased levels are seen in high cholesterol diets, nephrotic syndromes, multiple myeloma, hepatic obstruction or disease, anorexia nervosa, diabetes, chronic renal failure, and premature coronary heart disease.

Drugs which may have an adverse effect:
Clofibrate

***ALERT:** Some drugs are very dangerous to stop taking abruptly. If you are currently taking a medication that appears on this page, consult your medical professional before making any changes.

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healthy zone 0-25% | early warning zone 25-50% | high risk zone 50-100% | critical zone >100%

Recommended Further Testing

Frank
Male / Age: 66

Blood Test : 1/20/2011

Based on the results of your analysis, the following areas may deserve further investigation. Please consult your medical professional.

Consider ordering Environmental Pollutants Biomarker urine test.

Rationale: Glucose is out of range high (50%)

A number of environmental pollutants have been implicated in impairing glucose control.

Consider ordering Free-T3, Free-T4, Total T4, T3-Uptake

Rationale: Ultra-Sensitive TSH is out of range low (-50%)

Consider ordering glycohemoglobin

Rationale: Glucose is out of range high (50%)

Consider ordering PTH profile

Rationale: Panel Thyroid Imbalance Deviation is high (50%)

Consider ordering prostate specific antigen (PSA)

Rationale: Age is >= 40
Sex is Male

Consider ordering RBC magnesium

Rationale: GGT is out of range high (50%)

Panel Review and Progress Report

Frank
Male / Age: 66

Blood Test : 1/20/2011

Panel Results Out of Balance

Panels take the individual lab measurements and combine them into useful categories to help you better understand your health status. This page summarizes which panels are most out of balance, both in excess and deficiency. All panels that have an average % Imbalance greater than 25% are shown. The % Imbalance measures how far each result is from the middle of the lab reference range. It is also a way to compare items that have a different reference ranges. *See page 1 for a full explanation of the imbalance ranges.

Panel Name	% Imbalance	
Thyroid	66%	Deficiency
Cellular Distortions	29%	Excess
Oxidative Stress	27%	Excess
Protein	27%	Excess

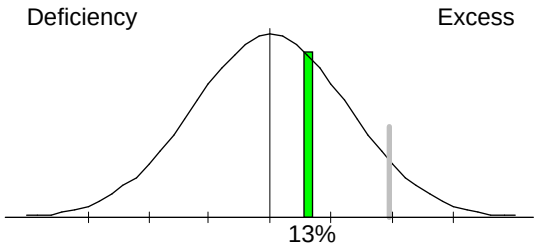
Full Panel Discussion and Progress Report

Panels take the individual lab measurements and combine them into useful categories to help you better understand your health status. This section explains each of the panels from the lab data provided. The current overall status for each panel is shown on the bell curve by the colored bar with the % Imbalance result. If you have measured this panel data in the past, the previous overall status is shown as the narrow grey column for comparison. The % Imbalance measures how far each result is from the middle of the lab reference range. It is also a way to compare items that have different reference ranges. *See page 1 for a full explanation of the imbalance ranges.

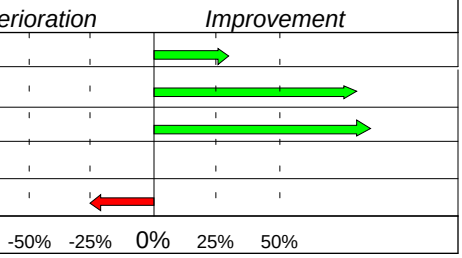
Adrenal Function

Panel components: Cholesterol, Eosinophils, Eosinophil Count, Potassium, Sodium[H].

This panel assesses your production of adrenaline. Adrenaline affects your daily function, such as your ability to handle stress. This profile shows a percent imbalance below 25%, so no abnormalities were found.



Progress Summary	2/21/2008		1/20/2011
Cholesterol	39%	H	9%
Eosinophils	88%	H	7%
Eosinophil Count	97%	H	11%
Potassium	11%		9%
Sodium	-5%		30% H
Panel % Imbalance	48%		13%



Frank
Male / Age: 66

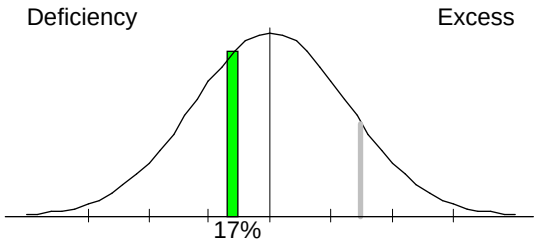
Blood Test : 1/20/2011

Panels take the individual lab measurements and combine them into useful categories to help you better understand your health status. This section explains each of the panels from the lab data provided. The current overall status for each panel is shown on the bell curve by the colored bar with the % Imbalance result. If you have measured this panel data in the past, the previous overall status is shown as the narrow grey column for comparison. The % Imbalance measures how far each result is from the middle of the lab reference range. It is also a way to compare items that have different reference ranges. *See page 1 for a full explanation of the imbalance ranges.

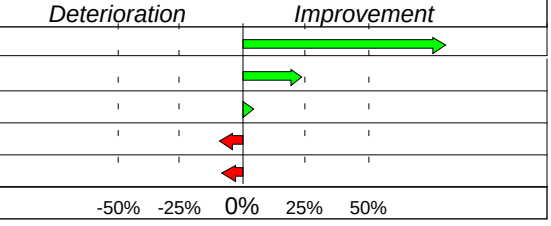
Allergy

Panel components: Eosinophils, Globulin[L], Lymphocytes, Monocytes, W.B.C..

This panel assesses your response to allergens from common sources such as foods, pets or pollens. This profile shows a percent imbalance below 25%, so no abnormalities were found.



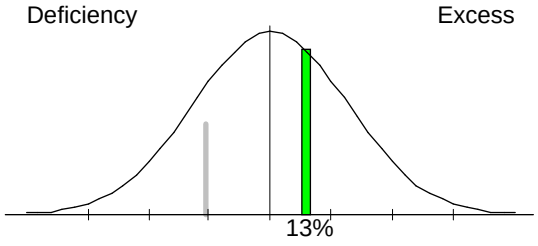
Progress Summary	2/21/2008		1/20/2011	
Eosinophils	88%	H	7%	
Globulin	-50%	L	-27%	L
Lymphocytes	-24%		-19%	
Monocytes	8%		17%	
W.B.C.	-10%		-18%	
Panel % Imbalance	36%		17%	



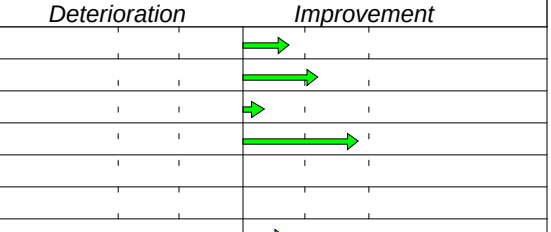
Athletic Potential

Panel components: B.U.N./Creatinine Ratio, Cholesterol, CO2, Creatinine, LDH, Potassium, Protein, Total, Sodium[H], HDL-Cholesterol.

This panel assesses your athletic potential and your ability to recover from injury. Maintaining a normal range helps optimize performance. Athletes require more nutrients because they deplete their supplies faster. This profile shows a percent imbalance below 25%, so no abnormalities were found.



Progress Summary	2/21/2008		1/20/2011	
B.U.N./Creatinine Ratio	-25%		6%	
Cholesterol	39%	H	9%	
CO2	-25%	L	-17%	
Creatinine	61%	H	16%	
LDH	-41%	L		
Potassium	11%		9%	
Protein, Total	-31%	L	-14%	
Sodium	-5%		30%	H
HDL-Cholesterol	-6%		3%	
Panel % Imbalance	27%		13%	



Frank [redacted]
Male / Age: 66

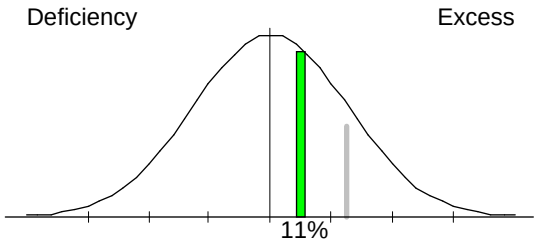
Blood Test : 1/20/2011

Panels take the individual lab measurements and combine them into useful categories to help you better understand your health status. This section explains each of the panels from the lab data provided. The current overall status for each panel is shown on the bell curve by the colored bar with the % Imbalance result. If you have measured this panel data in the past, the previous overall status is shown as the narrow grey column for comparison. The % Imbalance measures how far each result is from the middle of the lab reference range. It is also a way to compare items that have different reference ranges. *See page 1 for a full explanation of the imbalance ranges.

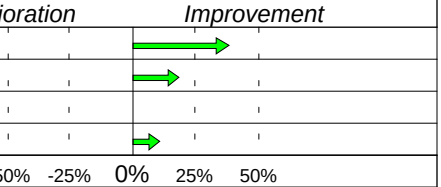
Biochemical Ratios

Panel components: A/G Ratio, B.U.N./Creatinine Ratio, Calcium/Phosphorus Ratio, Sodium/Potassium Ratio, Protein/Globulin Ratio, Chol/HDL Ratio.

Ratios indicate your balance of chemistry. It's the ratios between your test results - not just how much you have of something - that indicate balance. This profile shows a percent imbalance below 25%, so no abnormalities were found.



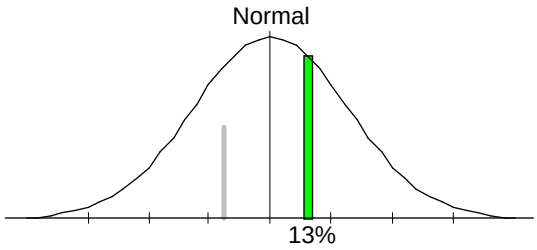
Progress Summary	2/21/2008		1/20/2011
A/G Ratio	62%	H	24%
B.U.N./Creatinine Ratio	-25%		6%
Calcium/Phosphorus Ratio	20%		
Sodium/Potassium Ratio	-13%		-2%
Panel % Imbalance	30%		11%



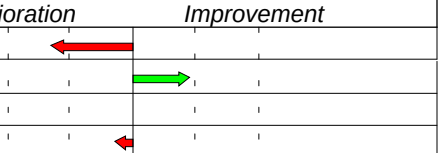
Bone/Joint

Panel components: Albumin[H], Alkaline Phosphatase, Calcium, Neutrophils, Phosphorus, Protein, Total, Uric Acid.

This panel helps assess bone and joint health. These markers show your body's ability to create healthy bones and joints. This profile shows a percent imbalance below 25%, so no abnormalities were found.



Progress Summary	2/21/2008		1/20/2011	
Albumin	10%		42%	H
Alkaline Phosphatase	-33%	L	-10%	
Calcium	-6%		2%	
Neutrophils	-5%		12%	
Phosphorus	-20%			
Protein, Total	-31%	L	-14%	
Uric Acid	32%	H	0%	
Panel % Imbalance	20%		13%	



Frank
Male / Age: 66

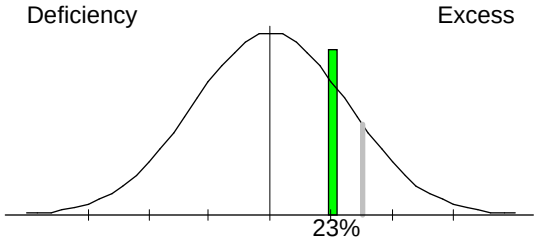
Blood Test : 1/20/2011

Panels take the individual lab measurements and combine them into useful categories to help you better understand your health status. This section explains each of the panels from the lab data provided. The current overall status for each panel is shown on the bell curve by the colored bar with the % Imbalance result. If you have measured this panel data in the past, the previous overall status is shown as the narrow grey column for comparison. The % Imbalance measures how far each result is from the middle of the lab reference range. It is also a way to compare items that have different reference ranges. *See page 1 for a full explanation of the imbalance ranges.

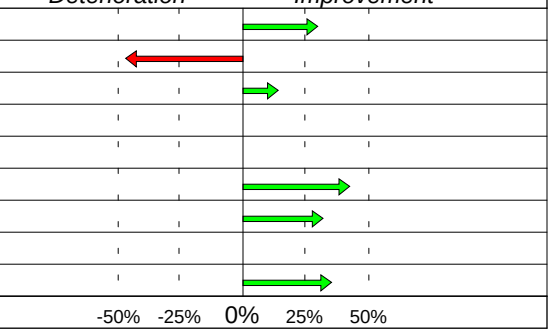
Cardiac Marker

Panel components: Cholesterol, GGT[H], Iron, Total, LDH, sGOT[L], Triglycerides, Uric Acid, VLDL, HDL-Cholesterol, LDL[H], Chol/HDL Ratio, Ferritin.

This panel is helpful in assessing cardiovascular disease risk. Maintaining a normal range may reduce your risk of cardiovascular disease (CVD). This profile shows a percent imbalance below 25%, so no abnormalities were found.



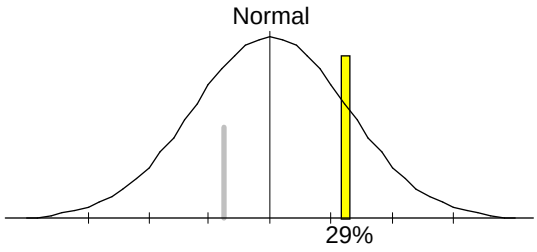
Progress Summary	2/21/2008		**1/20/2011**
Cholesterol	39%	H	9%
GGT	-13%		**59% H**
Iron, Total	34%	H	20%
LDH	-41%	L	
sGOT	-29%	L	-32% L
Triglycerides	52%	H	9%
Uric Acid	32%	H	0%
HDL-Cholesterol	-6%		3%
LDL	88%	H	**53% H**
Panel % Imbalance	37%		23%



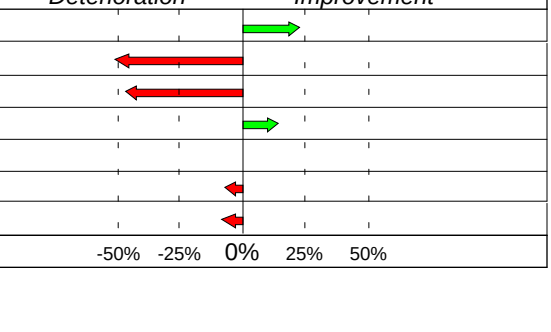
Cellular Distortions

Panel components: Alkaline Phosphatase, Anion Gap[H], GGT[H], Iron, Total, LDH, Neutrophils, W.B.C., Ferritin.

This panel may be helpful in determining your body's ability to properly produce healthy cells. This profile suggests a potential for serious cellular distortions. A review of your metabolic function is strongly recommended.



Progress Summary	2/21/2008		**1/20/2011**
Alkaline Phosphatase	-33%	L	-10%
Anion Gap	5%		**55% H**
GGT	-13%		**59% H**
Iron, Total	34%	H	20%
LDH	-41%	L	
Neutrophils	-5%		12%
W.B.C.	-10%		-18%
Panel % Imbalance	20%		29%

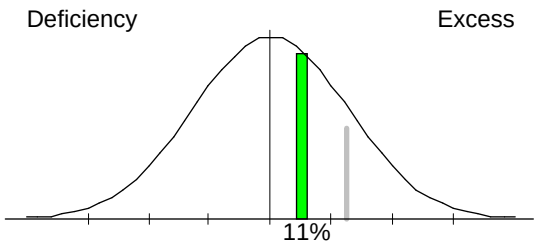


Panels take the individual lab measurements and combine them into useful categories to help you better understand your health status. This section explains each of the panels from the lab data provided. The current overall status for each panel is shown on the bell curve by the colored bar with the % Imbalance result. If you have measured this panel data in the past, the previous overall status is shown as the narrow grey column for comparison. The % Imbalance measures how far each result is from the middle of the lab reference range. It is also a way to compare items that have different reference ranges. *See page 1 for a full explanation of the imbalance ranges.

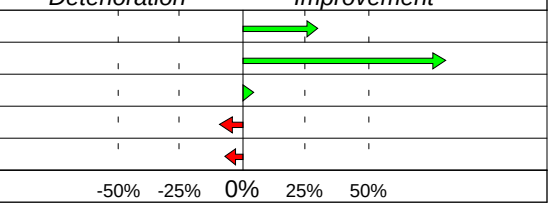
Differential

Panel components: Basophils, Eosinophils, Lymphocytes, Monocytes, Neutrophils.

This panel helps assess immune system health. It shows the percentage of specific white blood cells needed for proper immune response. This profile shows a percent imbalance below 25%, so no abnormalities were found.



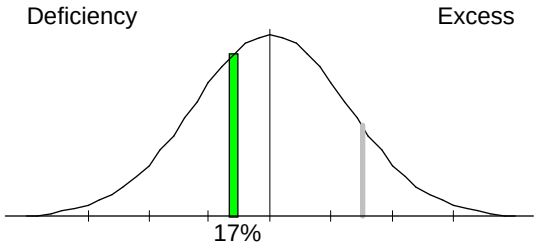
Progress Summary	2/21/2008		1/20/2011
Basophils	-30%	L	0%
Eosinophils	88%	H	7%
Lymphocytes	-24%		-19%
Monocytes	8%		17%
Neutrophils	-5%		12%
Panel % Imbalance	31%		11%



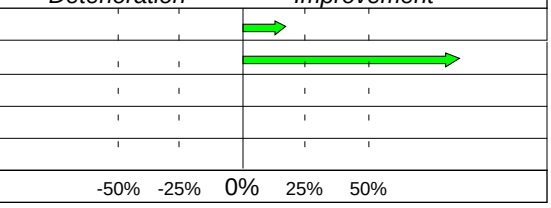
Differential Count

Panel components: Basophil Count, Eosinophil Count, Lymphocyte Count[L], Monocyte Count, Neutrophil Count.

This panel helps assess immune system health. It shows how many specific white blood cells your body has for proper immune response. This profile shows a percent imbalance below 25%, so no abnormalities were found.



Progress Summary	2/21/2008		1/20/2011	
Basophil Count	-37%	L	-20%	
Eosinophil Count	97%	H	11%	
Lymphocyte Count	-26%	L	-30%	L
Monocyte Count	-11%		7%	
Neutrophil Count	-14%		-18%	
Panel % Imbalance	37%		17%	

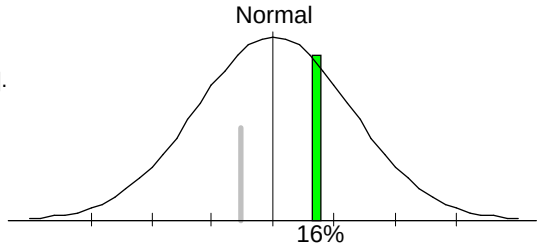


Panels take the individual lab measurements and combine them into useful categories to help you better understand your health status. This section explains each of the panels from the lab data provided. The current overall status for each panel is shown on the bell curve by the colored bar with the % Imbalance result. If you have measured this panel data in the past, the previous overall status is shown as the narrow grey column for comparison. The % Imbalance measures how far each result is from the middle of the lab reference range. It is also a way to compare items that have different reference ranges. *See page 1 for a full explanation of the imbalance ranges.

Electrolyte

Panel components: Calcium, Chloride, CO2, Phosphorus, Potassium, Sodium[H].

This panel represents the electrolyte balance in blood. Balance is critical in achieving optimal health. This profile shows a percent imbalance below 25%, so no abnormalities were found.

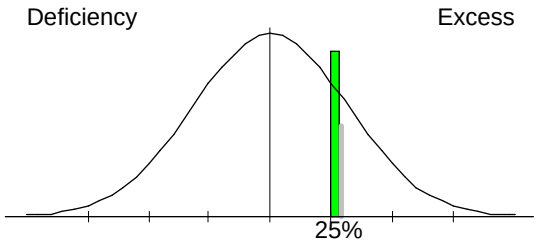


Progress Summary	2/21/2008		**1/20/2011**	*Deterioration* / *Improvement*
Calcium	-6%		2%	
Chloride	17%		23%	
CO2	-25%	L	-17%	
Phosphorus	-20%			
Potassium	11%		9%	
Sodium	-5%		30% H	
Panel % Imbalance	14%		16%	-50% -25% 0% 25% 50%

Gastrointest. Function

Panel components: Anion Gap[H], Chloride, Cholesterol, CO2, Monocytes, Potassium, Sodium[H], Triglycerides, LDL[H].

This panel helps assess gastrointestinal health. Keeping the elements listed in a normal range may improve digestion and the metabolism of proteins, fats and carbohydrates. This profile shows a percent imbalance below 25%, so no abnormalities were found.



Progress Summary	2/21/2008		**1/20/2011**	*Deterioration* / *Improvement*
Anion Gap	5%		**55% H**	
Chloride	17%		23%	
Cholesterol	39%	H	9%	
CO2	-25%	L	-17%	
Monocytes	8%		17%	
Potassium	11%		9%	
Sodium	-5%		30% H	
Triglycerides	52%	H	9%	
LDL	88%	H	**53% H**	
Panel % Imbalance	28%		25%	-50% -25% 0% 25% 50%

Frank
Male / Age: 66

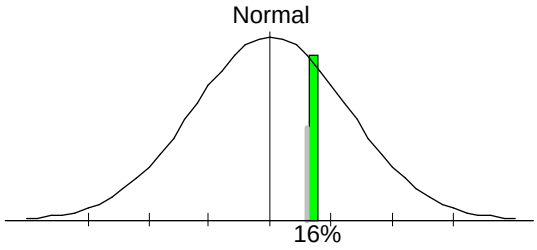
Blood Test : 1/20/2011

Panels take the individual lab measurements and combine them into useful categories to help you better understand your health status. This section explains each of the panels from the lab data provided. The current overall status for each panel is shown on the bell curve by the colored bar with the % Imbalance result. If you have measured this panel data in the past, the previous overall status is shown as the narrow grey column for comparison. The % Imbalance measures how far each result is from the middle of the lab reference range. It is also a way to compare items that have different reference ranges. *See page 1 for a full explanation of the imbalance ranges.

Hematology

Panel components: Hematocrit[H], Hemoglobin[H], MCH, MCHC, MCV, R.B.C., W.B.C..

This panel assesses the production of red blood cells and their function. This profile shows a percent imbalance below 25%, so no abnormalities were found.

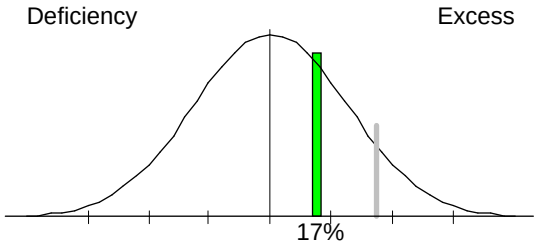


Progress Summary	2/21/2008		1/20/2011		Deterioration ... Improvement
Hematocrit	9%		26%	H	
Hemoglobin	9%		28%	H	
MCH	29%	H	3%		
MCHC	5%		8%		
MCV	21%		2%		
R.B.C.	-12%		24%		
W.B.C.	-10%		-18%		
Panel % Imbalance	14%		16%		-50% -25% 0% 25% 50%

Inflammatory Process

Panel components: Eosinophils, Globulin[L], LDH, Potassium, sGOT[L], sGPT, Triglycerides, Uric Acid, LDL[H], Monocytes.

This panel helps assess any inflammatory processes that may be occuring in the body. This profile shows a percent imbalance below 25%, so no abnormalities were found.



Progress Summary	2/21/2008		1/20/2011		Deterioration ... Improvement
Eosinophils	88%	H	7%		
Globulin	-50%	L	-27%	L	
LDH	-41%	L			
Potassium	11%		9%		
sGOT	-29%	L	-32%	L	
sGPT	-29%	L	-1%		
Triglycerides	52%	H	9%		
Uric Acid	32%	H	0%		
LDL	88%	H	**53%**	**H**	
Monocytes	8%		17%		
Panel % Imbalance	43%		17%		-50% -25% 0% 25% 50%

Frank
Male / Age: 66

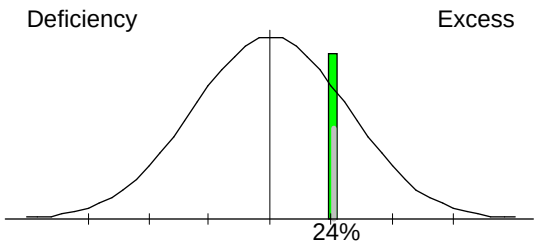
Blood Test : 1/20/2011

Panels take the individual lab measurements and combine them into useful categories to help you better understand your health status. This section explains each of the panels from the lab data provided. The current overall status for each panel is shown on the bell curve by the colored bar with the % Imbalance result. If you have measured this panel data in the past, the previous overall status is shown as the narrow grey column for comparison. The % Imbalance measures how far each result is from the middle of the lab reference range. It is also a way to compare items that have different reference ranges. *See page 1 for a full explanation of the imbalance ranges.

Kidney Function

Panel components: Albumin[H], B.U.N.[H], B.U.N./Creatinine Ratio, Chloride, CO2, Creatinine, Glucose[H], Potassium, Protein, Total, Sodium[H].

This panel helps assess kidney function. It is important to keep the elements of this subset in balance to help the body eliminate waste material. This profile shows a percent imbalance below 25%, so no abnormalities were found.

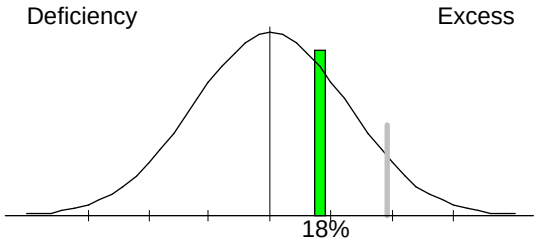


Progress Summary	2/21/2008		**1/20/2011**		*Deterioration* *Improvement*
Albumin	10%		42%	H	
B.U.N.	-11%		26%	H	
B.U.N./Creatinine Ratio	-25%		6%		
Chloride	17%		23%		
CO2	-25%	L	-17%		
Creatinine	61%	H	16%		
Glucose	59%	H	**53%**	**H**	
Potassium	11%		9%		
Protein, Total	-31%	L	-14%		
Sodium	-5%		30%	H	
Panel % Imbalance	25%		24%		-50% -25% 0% 25% 50%

Lipid

Panel components: Cholesterol, Triglycerides, VLDL, HDL-Cholesterol, LDL[H], Chol/HDL Ratio.

Lipid assessment is important in helping achieve optimal wellness as well as reducing cardiovascular disease risk. This profile shows a percent imbalance below 25%, so no abnormalities were found.



Progress Summary	2/21/2008		**1/20/2011**		*Deterioration* *Improvement*
Cholesterol	39%	H	9%		
Triglycerides	52%	H	9%		
HDL-Cholesterol	-6%		3%		
LDL	88%	H	**53%**	**H**	
Panel % Imbalance	46%		18%		-50% -25% 0% 25% 50%

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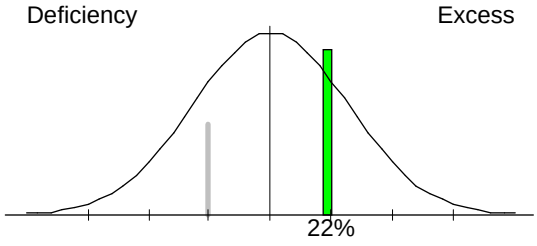
Liver Function

Panel components: Albumin[H], Alkaline Phosphatase, Bilirubin, Total, Cholesterol, GGT[H], Protein, Total, sGOT[L], sGPT.

Assessing liver function helps determine your body's ability to detoxify environmental toxins, stress hormones, drugs and other chemical toxins. It also shows your ability to process amino acids and other important biological processes. This profile shows a percent imbalance below 25%, so no abnormalities were found.

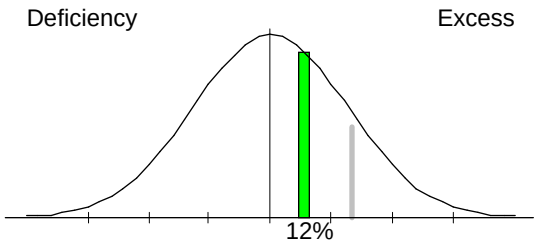


Progress Summary	2/21/2008		**1/20/2011**		*Deterioration* / *Improvement*
Albumin	10%		42%	H	
Alkaline Phosphatase	-33%	L	-10%		
Bilirubin, Total	30%	H	5%		
Cholesterol	39%	H	9%		
GGT	-13%		**59%**	**H**	
Protein, Total	-31%	L	-14%		
sGOT	-29%	L	-32%	L	
sGPT	-29%	L	-1%		
Panel % Imbalance	27%		22%		-50% -25% 0% 25% 50%

Nitrogen

Panel components: B.U.N.[H], B.U.N./Creatinine Ratio, Creatinine, Uric Acid.

Nitrogen is a major component of protein. This panel assesses if there's adequate protein in the diet and if the body metabolizes (uses) proteins properly. This profile shows a percent imbalance below 25%, so no abnormalities were found.



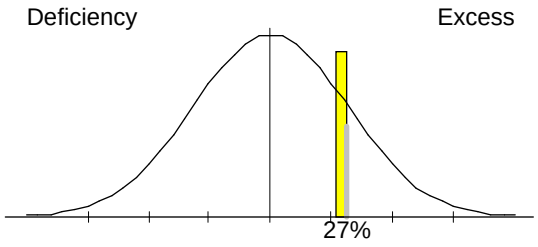
Progress Summary	2/21/2008		**1/20/2011**		*Deterioration* / *Improvement*
B.U.N.	-11%		26%	H	
B.U.N./Creatinine Ratio	-25%		6%		
Creatinine	61%	H	16%		
Uric Acid	32%	H	0%		
Panel % Imbalance	32%		12%		-50% -25% 0% 25% 50%

Panels take the individual lab measurements and combine them into useful categories to help you better understand your health status. This section explains each of the panels from the lab data provided. The current overall status for each panel is shown on the bell curve by the colored bar with the % Imbalance result. If you have measured this panel data in the past, the previous overall status is shown as the narrow grey column for comparison. The % Imbalance measures how far each result is from the middle of the lab reference range. It is also a way to compare items that have different reference ranges. *See page 1 for a full explanation of the imbalance ranges.

Oxidative Stress

Panel components: Anion Gap[H], Bilirubin, Total, Chloride, Cholesterol, Glucose[H], Iron, Total, Ferritin.

Oxidation is like the rusting of cells. Reducing oxidation is critical for healthy cell function and to slow the aging process. This profile may indicate a need for more antioxidants. And shows you may need to make appropriate lifestyle changes (e.g.: quit smoking, quit/reduce alcohol, reduce stress, etc.). Consider supplementing with a varied, broad spectrum of antioxidants rather than one or two alone.

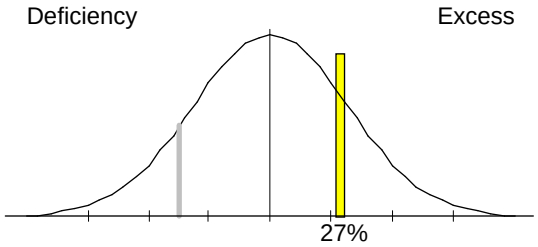


Progress Summary	2/21/2008		**1/20/2011**	*Deterioration* / *Improvement*
Anion Gap	5%		**55% H**	
Bilirubin, Total	30%	H	5%	
Chloride	17%		23%	
Cholesterol	39%	H	9%	
Glucose	59%	H	**53% H**	
Iron, Total	34%	H	20%	
Panel % Imbalance	31%		27%	-50% -25% 0% 25% 50%

Protein

Panel components: A/G Ratio, Albumin[H], Globulin[L], Protein, Total, Protein/Globulin Ratio.

Proteins are the basic building blocks of all cells including: hormones, muscle, neurotransmitters, immune systems responses and more. Assessing their competency is crucial in achieving optimal wellness. This profile may indicate missing nutrient co-factors needed to properly utilize proteins. It may also indicate you are eating too much protein. Review diet, potential immune responses and liver disorders. Look for potential amino acid metabolism disorders.



Progress Summary	2/21/2008		**1/20/2011**	*Deterioration* / *Improvement*
A/G Ratio	62%	H	24%	
Albumin	10%		42% H	
Globulin	-50%	L	-27% L	
Protein, Total	-31%	L	-14%	
Panel % Imbalance	38%		27%	-50% -25% 0% 25% 50%

Frank
Male / Age: 66

Blood Test : 1/20/2011

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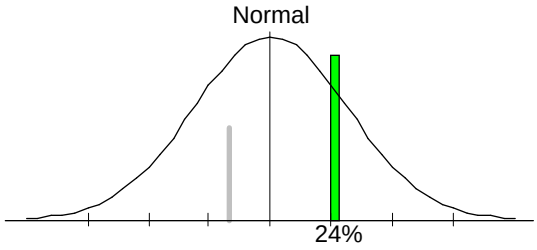
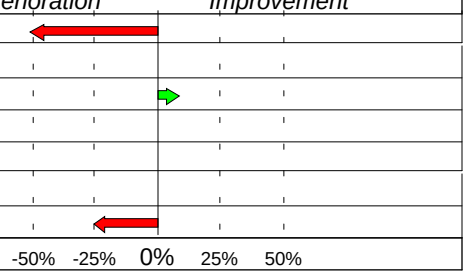
Pulmonary Function

Panel components: Anion Gap[H], Calcium, CO2, LDH, Potassium, sGOT[L], Sodium[H].

This panel helps assess lung and respiratory function. This profile shows a percent imbalance below 25%, so no abnormalities were found.



Progress Summary	2/21/2008		**1/20/2011**
Anion Gap	5%		**55% H**
Calcium	-6%		2%
CO2	-25%	L	-17%
LDH	-41%	L	
Potassium	11%		9%
sGOT	-29%	L	-32% L
Sodium	-5%		30% H
Panel % Imbalance	17%		24%



Thyroid

The Thyroid panel normally consists of Free T-3, T-3 Concentration, Thyroxine (T4), T-3 Uptake, Free T4 Index (T7), Ultra-Sensitive TSH, and Free T-4.

However, only test results for Thyroxine (T4) and Ultra-Sensitive TSH were provided for this report. If you are interested in seeing your Thyroid panel results, we recommend you run the following incremental tests: Free T-3, T-3 Concentration, T-3 Uptake, Free T4 Index (T7) and Free T-4.

Progress Report Summary

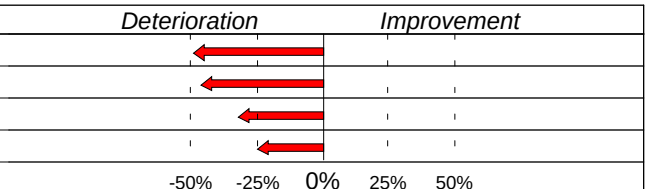
Frank
Male / Age: 66

Blood Test : 1/20/2011

This page summarizes all results that improved or deteriorated at least 25%. The arrow's length is proportional to the change in the lab value. Green arrows represent improvement. Red arrows represent deterioration.

Imbalance % on:	2/21/2008	**1/20/2011**
Eosinophil Count	97% H	11%
Eosinophils	88% H	7%
Creatinine	61% H	16%
Triglycerides	52% H	9%
A/G Ratio	62% H	24%
LDL	88% H	**53% H**
Uric Acid	32% H	0%
Cholesterol	39% H	9%
Basophils	-30% L	0%
sGPT	-29% L	-1%
MCH	29% H	3%
Bilirubin, Total	30% H	5%
Average % Imbalance	30%	**21%**
Direction of Imbalance	Excess	**Excess**

Imbalance % on:	2/21/2008	**1/20/2011**
Anion Gap	5%	**55% H**
GGT	-13%	**59% H**
Albumin	10%	42% H
Sodium	-5%	30% H
Average % Imbalance	30%	**21%**
Direction of Imbalance	Excess	**Excess**



For the full discussion of out-of-range results, see page 4.

For the alphabetical listing of all Blood Test progress results, see page 18.

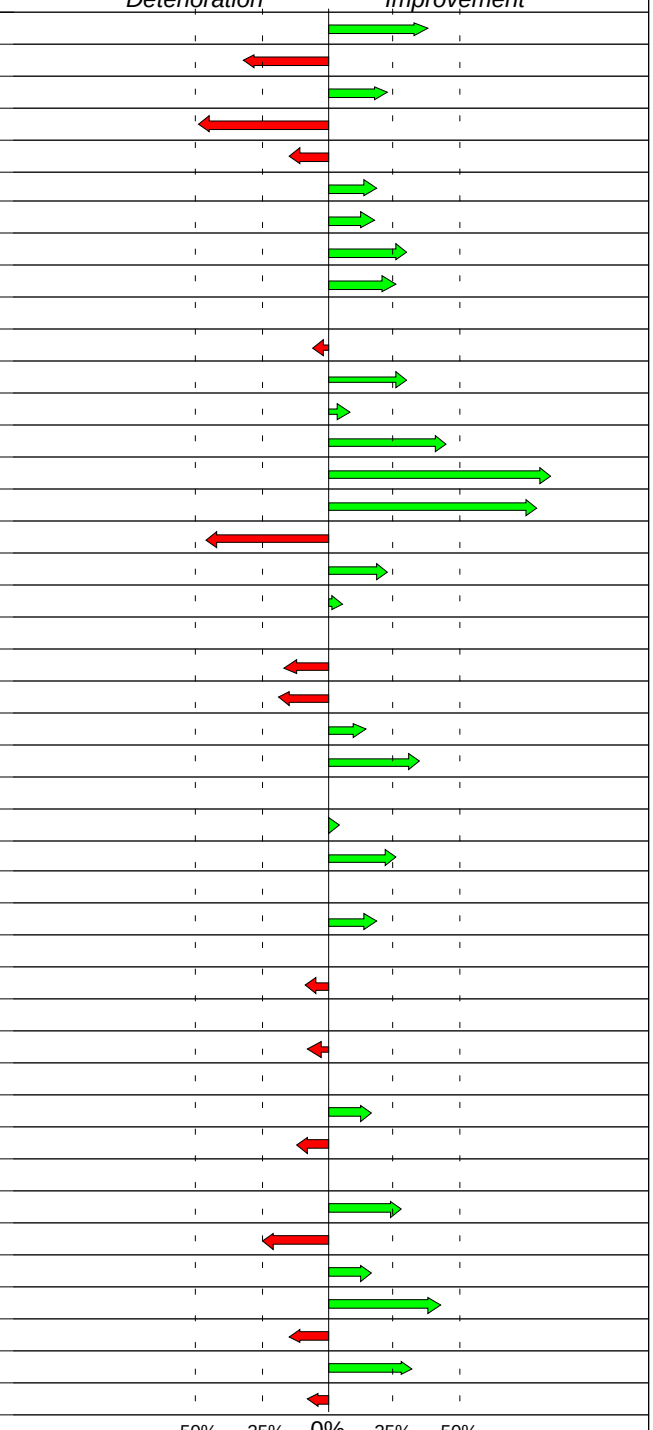
Detailed Progress Report Summary

Frank
Male / Age: 66

Blood Test : 1/20/2011

This page shows all of the results' changes. The arrow's length is proportional to the change in the lab value. Green arrows represent improvement. Red arrows represent deterioration.

Imbalance % on:	2/21/2008		**1/20/2011**	
A/G Ratio	62%	H	24%	
Albumin	10%		42%	H
Alkaline Phosphatase	-33%	L	-10%	
Anion Gap	5%		**55%**	**H**
B.U.N.	-11%		26%	H
B.U.N./Creatinine Ratio	-25%		6%	
Basophil Count	-37%	L	-20%	
Basophils	-30%	L	0%	
Bilirubin, Total	30%	H	5%	
Calcium	-6%		2%	
Chloride	17%		23%	
Cholesterol	39%	H	9%	
CO2	-25%	L	-17%	
Creatinine	61%	H	16%	
Eosinophil Count	97%	H	11%	
Eosinophils	88%	H	7%	
GGT	-13%		**59%**	**H**
Globulin	-50%	L	-27%	L
Glucose	59%	H	**53%**	**H**
HDL-Cholesterol	-6%		3%	
Hematocrit	9%		26%	H
Hemoglobin	9%		28%	H
Iron, Total	34%	H	20%	
LDL	88%	H	**53%**	**H**
Lymphocyte Count	-26%	L	-30%	L
Lymphocytes	-24%		-19%	
MCH	29%	H	3%	
MCHC	5%		8%	
MCV	21%		2%	
Monocyte Count	-11%		7%	
Monocytes	8%		17%	
Neutrophil Count	-14%		-18%	
Neutrophils	-5%		12%	
Potassium	11%		9%	
Protein, Total	-31%	L	-14%	
R.B.C.	-12%		24%	
sGOT	-29%	L	-32%	L
sGPT	-29%	L	-1%	
Sodium	-5%		30%	H
Thyroxine (T4)	-20%		-3%	
Triglycerides	52%	H	9%	
Ultra-Sensitive TSH	113%	H	**-128%**	**L**
Uric Acid	32%	H	0%	
W.B.C.	-10%		-18%	
Average % Imbalance	30%		**21%**	
Direction of Imbalance	Excess		**Excess**	



Health Improvement Plan Checklist

Frank
Male / Age: 66

Blood Test : 1/20/2011

Your Health Improvement Plan takes all of your biochemical data and imbalances, and makes personalized recommendations to help you bring your body back into balance. All recommendations are backed by published medical research. This page is a summary of the nutritional recommendations. Please consult with your healthcare professional.

Supplement Recommendations

The following supplements may help. Consult your practitioner:

- ☐ **Cardiovascular Health Protocol**
  See Nutrition Detail
- ☐ **Multivitamin w/Glucose Support**
  2x daily
- ☐ **Chromium Picolinate**
  1x daily 200 mcg
- ☐ **Garlic**
  1 - 3 times daily
- ☐ **Increase Fluid Intake**
  6-8 glasses daily
- ☐ **Acetic Acid**
  2x daily 1 tsp. (in 8 oz distilled water)
- ☐ **Billberry**
  1 - 3 times daily
- ☐ **Ginseng (Panax)**
  1 - 3 times daily

Supplements to AVOID

The following supplements may aggravate already out-of-balance biochemistry:

Sodium

Food Recommendations

The following foods may help balance or strengthen your biochemistry:

Fruits
Banana
Guava
Loganberries
Pumpkin

Poultry & Eggs
Eggs

Vegetables
Artichoke
Eggplant
Green Beans
Yams

Foods to AVOID

The following foods may aggravate already out-of-balance biochemistry:

Condiments
Barbeque Sauce
Soy Sauce

Fish
Anchovies

Meat
Bacon
Chipped Beef
Corned Beef
Ham
Pastrami

Other
Fast Foods
Hydrogenated Fats

Vegetables
Dill Pickles
Sauerkraut

Your Health Improvement Plan takes all of your biochemical data and imbalances, and makes personalized recommendations to help you bring your body back into balance. All recommendations are backed by published medical research. This section explains the rationale behind each of the nutritional recommendations. Please consult with your healthcare professional.

Cardiovascular Health Protocol

Rationale

Cholesterol, Uric Acid and HDL-Cholesterol are normal.
LDL is high.

This pattern indicates suboptimal operation of fat metabolism, interfering with efficient cellular energy production. Various pathways being over- or under- utilized can be nutritionally supported with digestive enzymes, B-Complex, Lipoic acid, and CoEnzyme Q10 supplementation. Recommended nutrients include:
B-Complex (2x daily)
Lipoic Acid (2x daily)
CoEnzyme Q10 (2x 50 mg daily)
Digestive Enzymes (1-2 with each meal)

Wallace, DC, Mitochondrial genetics: a paradigm for aging and degenerative diseases?, Science, 256:628-632 (1992).
Corral-Debrinski, Shffner JM, Lott MY, Wallace DC, Association of mitochondrial DNA damage with aging and coronary artherosclerotic heart disease. Mutat Res, 275:169-180 (1992).

Increase Fluid Intake 6-8 glasses daily

Rationale

R.B.C. is normal.
Hematocrit and Hemoglobin are high.

When the concentration of Hemoglobin, Hematocrit and Red Blood Cells are increased, it is a good indicator of the need to increase fluid intake. Fluid intake should include a well rounded group of fluids including, but not limited to water.

Multivitamin w/Glucose Support 2x daily

Rationale

Triglycerides is normal.
Glucose is high.

A multivitamin with nutrients to help moderate glucose levels may be helpful in balancing your chemistry.

Acetic Acid 2x daily 1 tsp. in 8 oz distilled water

Rationale

Sodium is high.

Acetic acid, also known as vinegar, has been shown to lower sodium levels in part by combining with the sodium ion and creating sodium acetate which is removed by the kidneys.

Chromium Picolinate 1x daily 200 mcg

Rationale

Cholesterol and Triglycerides are normal.
Glucose is high.

Constituent of GTF (glucose tolerance factor), works with insulin promoting glucose uptake. Functions in metabolism in nucleic acids, lipid metabolism, cholesterol and triglycerides.

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Billberry 1 - 3 times daily

Rationale

Iron, Total and Triglycerides are normal.
Glucose is high.

Billberry (Vaccinium myrtillus) is an herb often used for the control of insulin levels and may help halt or prevent macular degeneration. It has also been reported to be effective in lowering triglyceride levels. As with any herb, caution should be taken with its use. Bilberry also may interfere with iron absorption.

Garlic 1 - 3 times daily

Rationale

Cholesterol is normal.
LDL is high.

Garlic's use has been reported to be beneficial in lowering blood lipid (fat) levels. May cause unwanted bodily odors. As with any herb, caution should be taken with its use.

Ginseng (Panax) 1 - 3 times daily

Rationale

Glucose is high.

Also known as Korean Ginseng (Panax ginseng), this herb has shown benefits to those suffering from fatigue, stress, compromised immune systems and diabetes. As with any herb, caution should be taken with its use. Women who experience breast tenderness should discontinue its use.

Supplements to Avoid

AVOID Sodium

Rationale

Sodium is high.

Sodium is the major extracellular fluid cation. It is responsible for and helps determine the volume of extracellular fluid as it is responsible for almost one-half of plasma osmolarity. Sodium facilitates impulse transmission in nerve and muscle fibers by its involvement in the sodium-potassium pump.

Aggravating Drugs List

Frank
Male / Age: 66

Blood Test : 1/20/2011

Drugs listed below tend to further aggravate elements of blood chemistry that are out of range (H or L). The number after each drug denotes the number of elements in your biochemistry that can potentially be further imbalanced by that drug. *see ALERT at bottom of the page.

If a drug does not appear on this list, it does not mean it would not aggravate your biochemistry. This analysis is based on the lab data provided, which may or may not include all relevant measures of your biochemistry. Please consult with your healthcare professional. *see ALERT at bottom of page.

ACE Inhibitors
Ramipril

Analgesics
Acetaminophen(2)
Aspirin(2)
Codeine
Morphine(2)
Propoxyphene
Salicylates(2)

Anti-Fungals
Amphotericin B
Griseofulvin

Anti-inflammatories
Carbenoxolone(2)
Diclofenac(2)
Ibuprofen(2)
Indomethacin(2)
Ketoprofen
Penicillamine
Phenylbutazone(3)
Piroxicam

Antianxieties
Chloral hydrate
Diazepam
Paraldehyde
Phenobarbital(2)

Antibiotics
Cephaloridine
Colistin
Echinomycin
Ethionamide
Gentamicin
Kanamycin
Methicillin
Neomycin
Nitrofurantoin(2)
Ofloxacin(2)
Paramethadione
Plicamycin
Rifampin(2)
Spectinomycin
Streptomycin
Tetracycline(2)
Troleandomycin
Vancomycin

Anticoagulants
Streptokinase

Anticonvulsants
Carbamazepine(4)
Diphenylhydantoin(2)
Paramethadione
Phenytoin(2)
Trimethadione
Valproic Acid

Antidiabetic
Carbutamide

Antihypertensives
Guanethidine(2)
Propranolol
Reserpine

Antineoplastics and Antimetabolites
Busulfan
Hydroxyurea(2)
Methotrexate(2)

Antiplasticity Agents
Plicamycin

Antipsychotics and Antidepressants
Chlorpromazine
Lithium Carbonate(2)
Phenelzine(2)
Protriptyline
Reserpine

Antiviral
Acyclovir
Amantadine

Bronchodialators
Albuterol
Isoproterenol

Cardiovascular Agents
Nifedipine(2)

Central Acting Alpha 2-Stimulants
Clonidine(2)
Methyldopa(4)

Converting Enzyme Inhibitors
Ramipril

Diuretics
Acetazolamide(2)
Chlorthalidone(2)
Clopamide(2)
Ethacrynic Acid(2)
Furosemide(3)
Polythiazide(2)
Triameterene

Drugs of Abuse
Marijuana

Endothelin Antagonists
Levonorgestrel(2)
Vasopressin

Hormonal Agents and Cytokines
ACTH
Estrogens
Progesterone(2)
Progestins(4)

Hypoglycemic Agents
Acetohexamide(2)
Chlorpropamide

Hypouricemic Agents
Allopurinol(3)
Probenecid

Immunosuppressants
Mercaptopurine

Lipid Lowering Agents
Clofibrate
Gemfibrozil
Pravastatin

PDE5 inhibitor
Sildenafil(2)
Tadalafil(2)
Vardenafil(2)

Renin Inhibitors
Arginine(2)
Dextran(3)

Serotonergic Antagonists
Amitriptyline
Haloperidol(2)
Imipramine(2)
Thiothixene

Steroids
Corticosteroids(3)
Cortisone(2)
Hydrocortisone
Prednisone(3)

Sympathomimetics
Anabolic Steroids
Levodopa(2)

Vasoldialators
Diazoxide(2)
Hydralazine

***ALERT:** Some drugs are very dangerous to stop taking abruptly. If you are currently taking a medication that appears on your aggravating drug list, consult your medical professional before making any changes.

Health Risk Assessment

Frank
Male / Age: 66

Blood Test : 1/20/2011

Your Health Risk Assessment takes all of your biochemical data and compares it to known disease patterns. You get a more complete picture of your health status by looking at the patterns of imbalances, not just the individual data points. This gives you more clarity in deciding where to focus your efforts.

Different “diseases” are not just medical terms. It has been shown that each disease represents a unique biochemical imbalance pattern. If a disease is listed on this page, it does not necessarily mean you have that disease. What it does mean is that there are biochemical imbalances present that are consistent with the imbalance pattern of that disease. Think of this as an early warning system. Your Health Improvement Plan helps address the specific imbalances shown.

Listed are both the measurements that are consistent with the disease pattern, as well as those that are not at risk. This approach also helps you understand where you are doing just fine. When you see measurements that are in balance, sometimes that means what you are already doing is working. Sometimes that shows you where your body is naturally able to maintain balance.

If a disease is not listed, that does not mean you are not at risk. This analysis is based on the lab data provided, which may or may not include all relevant measures of your biochemistry. Please consult with your healthcare professional.

Health risks are listed when there is a two-thirds (2/3) or greater match between your biochemical imbalances and a known disease pattern. No matches were found at this time.

All information provided in this Bio-Clarity™ report is provided for educational purposes only. The information available in this report should not be used as a substitute for professional medical care for the prevention, diagnosis, or treatment of health conditions.

This information should not be considered complete, nor should it be relied on in diagnosing or treating a medical condition. Content in this report does not contain information on all diseases, ailments, physical conditions or their treatment. Content in this report is based on the lab data provided, which may or may not include all relevant measures of your biochemistry.

The absence of a warning for a given drug or drug combination in no way should be construed to indicate that the drug or drug combination is safe, effective or appropriate for you. The absence of a warning for a given supplement or supplement combination in no way should be construed to indicate that the drug or drug combination is safe, effective or appropriate for you.

You are encouraged to confirm any information obtained from this report with other sources, and review all information regarding any medical condition or treatment with your physician.

NEVER DISREGARD PROFESSIONAL MEDICAL ADVICE OR DELAY SEEKING MEDICAL TREATMENT BECAUSE OF SOMETHING YOU HAVE READ ON OR ACCESSED THROUGH THIS HEALTH ASSESSMENT.

Consult your physician or a qualified healthcare practitioner regarding the applicability of any of the information or materials provided in this Bio-Clarity™ report in regards to your symptoms or medical condition. Always consult your physician before beginning a new treatment, diet or fitness program.