

Bio-Center Laboratory

CLIA#: 17D0648333

3100 N. Hillside, Wichita, KS 67219
 (316) 684-7784 Fax (316) 682-2062
 Laboratory Director : Charles Hinshaw, M.D.

Medicare #: 008052

■ Needs Improvement
 ■ Within Acceptable Range (+ 2 Standard Deviations)
 ■ Beyond the Expected Range
 * Below Detectable Limits

			Result	Expected Range	Units
<u>VITAMINS/NUTRIENTS</u>					
Vitamin A			35	24 - 90	ug/dL
Vitamin E		L	0.5	0.6 - 2.7	mg/dL
Vitamin C, Plasma			1.8	0.6 - 2.0	mg/dL
Vitamin C, Urine			40	20 - 50	mg/dL
Vitamin D (25-OH-D)		L	14	40 - 80	ng/mL
Vit. B12-Cobalamin		H	2000	165 - 1100	pg/mL
	Optimal levels are achieved when test results lie between 1000-2000 pg/mL.				
Folic Acid (Folate)		L	7.0	7.2 - 17.2	ng/mL
Beta Carotene			20	5 - 65	ug/dL
Lutein		L	5	7 - 28	ug/dL
Lycopene		H	57	13 - 54	ug/dL
Coenzyme Q10			1.0	0.3 - 1.5	ug/mL
<u>B ASSESSMENT PROFILE</u>					
Vit. B1-Thiamine			50	33 - 110	ug/L
Vit. B2-Riboflavin			12.0	2.8 - 20.0	ug/L
Vit. B3-Niacin			2.9	1.2 - 2.9	ug/mL
Vit. B5-Pantothenic Acid			20.0	10.0 - 36.0	mg/dL
Vit. B6-Pyridoxine			70	42 - 89	% sat.
<u>MINERALS</u>					
Magnesium, RBC		L	3.8	4.0 - 6.4	mg/dL
Copper, RBC			60	46 - 79	ug/dL

Name : DOE, JOHN L

Account #: 0001

Chart Number: C0001

DOB : 12 / 14 / 1976

Age : 32 Yrs

Sex : Male

Source : RON HUNNINGHAKE, M.D.

Specimen Collected: 10 / 01 / 2009 11 : 48 AM

Fasting Since :

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DOE, JOHN L

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			Result	Expected Range	Units
Manganese, RBC			1.5	1.1 - 1.7	ug/dL
Selenium, RBC		L	55	75 - 240	ug/L
Zinc, RBC			13.0	8.6 - 15.8	ug/mL
Chromium, Serum			1.5	0.1 - 1.7	ug/L
Boron, Urine			0.5	0.5 - 2.5	ug/mL
Strontium, Urine			0.015	0.012 - 0.132	ug/mL
Phosphorus, Serum			3.5	2.4 - 4.2	mg/dL
Calcium, Serum			9.0	8.5 - 10.6	mg/dL
<u>AMINO ACIDS</u>					
Glutamine			66	48 - 84	umol/dL
Taurine			6.7	2.8 - 6.8	umol/dL
<u>AMINO ACIDS-ESSENTIAL</u>					
Histidine			5.0	2.4 - 10.0	umol/dL
Isoleucine		L	3.0	4.0 - 10.0	umol/dL
Leucine			13.0	9.5 - 19.5	umol/dL
Lysine			20.0	11.0 - 25.0	umol/dL
Methionine			4.0	1.7 - 4.5	umol/dL
Phenylalanine		H	8.9	3.5 - 8.4	umol/dL
Threonine			10.0	5.5 - 14.1	umol/dL
Tryptophan		L	0.6	0.7 - 2.0	umol/dL
Valine			20.0	18.0 - 34.0	umol/dL
Arginine			6.0	2 - 6	umol/dL
<u>THYROID TESTING</u>					
Free T3		L	1.35	1.45 - 3.48	pg/mL

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LIPID PROFILE				
Cholesterol		190	100 - 200	mg/dL
	Optimal levels are achieved when results lie between 160 and 200 mg/dL.			
Triglycerides		80	35 - 150	mg/dL
HDL Cholesterol	 L	25	29 - 72	mg/dL
VLDL		16	5 - 30	mg/dL
LDL	 H	149	50 - 100	mg/dL
	LDL RISK CLASSIFICATION		ADULT (mg/dL)	
	Desirable	<100		
	Borderline risk	100 - 159		
	High risk	> 160		
	Note: Optimal levels are between	50 - 100		
Cholesterol/HDL Ratio	 H	7.6	0.0 - 5.0	Ratio
	CHOLESTEROL/HDL RATIO (RISK CLASSIFICATION)			
		MALE	FEMALE	
	1/2 average risk	< 3.4	< 3.3	
	Average risk	3.4 - 5.0	3.3 - 4.4	
	2 times average risk	5.1 - 9.6	4.5 - 7.1	
	3 times average risk	9.7 - 23.0	7.2 - 11.0	
	Note: Optimal levels are between	2.0 - 4.0		
LDL/HDL Ratio	 H	6.4	0.0 - 3.6	Ratio
	LDL/HDL RATIO (RISK CLASSIFICATION)			
		MALE	FEMALE	
	1/2 average risk	< 1.0	< 1.5	
	Average risk	1.0 - 3.6	1.5 - 3.2	
	2 times average risk	3.7 - 6.3	3.3 - 5.0	
	3 times average risk	6.4 - 8.0	5.1 - 6.1	
	Note: Optimal levels are between	0.5 - 2.5		
URINE CHEMISTRIES				
Potassium (K), Urine		4.0		mmol/L
Sodium (Na), Urine		2		mmol/L
K/Na Ratio	 H	2.00	0.40 - 1.00	Ratio
Pyroles, Urine	 H	30	0 - 20	ug/dL
FATTY ACIDS-OMEGA 6-RBC				
Linoleic		100	90 - 182	uM/L

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DOE, JOHN L

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		Result	Expected Range	Units
Gamma Linolenic (GLA)		2.0	0.7 - 3.5	uM/L
Dihomogammalinolenic		20	11 - 31	uM/L
Arachidonic		200	90 - 250	uM/L
Total Omega-6		322.0	191.7 - 466.5	uM/L
<u>FATTY ACIDS-OMEGA 3-RBC</u>				
Alpha Linolenic		2.8	0.5 - 2.9	uM/L
Eicosapentaenoic (EPA)		5.0	4.0 - 20.0	uM/L
Docosahexaenoic (DHA)		50	14 - 90	uM/L
Total Omega-3		57.8	18.5 - 112.9	uM/L
Arachidonic/EPA	 H	40.0	5.0 - 13.0	Ratio
<u>FATTY ACID-MONOUNSAT.-RBC</u>				
Oleic		260	120 - 260	uM/L
<u>FATTY ACID-Unsaturat.-RBC</u>				
Total Unsaturated		640	330 - 839	uM/L
<u>FATTY ACID-SATURATED-RBC</u>				
Palmitic	 H	450	210 - 370	uM/L
Stearic	 H	500	215 - 375	uM/L
Total Saturated	 H	950	425 - 745	uM/L
Unsat. to Saturated Ratio	 L	0.67	0.78 - 1.13	Ratio
<u>TRANS FATTY ACIDS-RBC</u>				
Elaitic (C-18)	 H	15.0	2.0 - 10.0	uM/L
<u>GLUCOSE MONITORING</u>				
Glucose, Fasting		88	65 - 99	mg/dL

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		Result	Expected Range	Units
Hemoglobin A1c		5.4	4.5 - 5.7	%
	HgbA1c degree of glucose control for diabetics: > 8.0% Action suggested 4.5- 7.0% Goal of diabetic therapy			
Estimated Average Glucos		108	83 - 117	mg/dL
<u>SPECIAL ASSAYS</u>				
DHEA-S	 L	25	59 - 452	ug/dL
CRP-hs	 H	6.0	0.0 - 1.9	mg/L
	C-Reactive Protein (CRP) Risk Factors < 0.7 mg/L Lowest Risk 0.7 - 1.1 mg/L Low Risk 1.2 - 1.9 mg/L Moderate Risk 2.0 - 3.8 mg/L High Risk > 3.8 mg/L Highest Risk			
Lipoprotein (a)		4	0 - 30	mg/dL
Homocysteine	 H	16.0	5.0 - 15.0	umol/L

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