Prof. Peskin's DPA Scan & Advanced Lipid Analysis

Blood Chemistry: What's Important to me?

Note: Enclosed are my results along with my personal opinions of these specific results. Again, they are my opinions as I am not a physician, but a medical scientist — I do NOT dispense medical advice. Consult with your physician as to specific interpretations of any specific test. Prof. Peskin is a compensated consultant to a leading DPA manufacturer. Please contact him for additional information.

With the 2008 JUPITER Study, it was (once again) confirmed that lowering LDL-C was ineffective in preventing cardiovascular disease. It is well known that cholesterol levels are not predictive of CVD. Furthermore, the Number Needed to Treat (NNT) to see 1 patient success is 100 (as reported by pharmaceutical companies), meaning that **statins carry at best a 99% failure rate, dreadful**.

The study authors then suggested the benefit of statins was in lowering C-reactive protein (CRP) levels. This is another fallacy that I have written about in depth.

With the March, 2010 ACCORD study, cardiovascular physicians were disheartened to learn that common treatment protocols for cardiovascular disease in diabetic patients were ineffective. Among these findings were:

A) Medications to pharmacologically lower high blood pressure, and
B) Medications to pharmacologically lower high triglyceride levels in type II diabetics made no improvement.

These "standard interventions" made NO difference, as they were ineffective in decreasing rates of cardiovascular disease.

Since high-risk diabetic patients showed no positive effect with BP and triglyceride lowering treatments, it is unlikely any patient will benefit with these interventions. Pharmacologic (artificial) — not physiologic lowering of BP and triglyceride levels — may sound good, but don't work. If you have followed my work you will understand why.

What are physicians and patients to rely on as an accurate measure of CV risk if blood pressure, triglycerides, and cholesterol are discarded? **My answer is a DPA test to assess the physiologic characteristics of your cardiovascular system**. The rationale for this suggestion and particulars of the test is featured in the May issue of *Townsend Letter for Physicians*. I hope for their patient's health, that many physicians implement this testing in the near future. **If your physician doesn't have a DPA machine, give him a copy of the Townsend article so he will understand its importance in developing an accurate diagnostic picture**.

Regarding blood lipids, based on today's state-of-the-art medical science, here is what I, and other medical researchers consider important. Many physicians will not be familiar with these advanced tests, so the tests offered by the following companies will be helpful. These tests may be covered by your insurance so be sure to ask:

a) Lipoprotein particle profile (www.spectracell.com) plus the individual Lp-PLA2 test. The panel gives the Lp(a) level, which is a pro-thrombotic small, dense LDL, the *enzyme Lp-PLA2* which is

produced *in the plaque itself*, and *panel of LDL particle size distribution* and includes other important diagnostic factors including: C-reactive protein, Insulin, and Homocysteine levels. I particularly review the *insulin level* (mine is very low), *LDL particle sizes* — III & IV density values, and RLP (remnant lipoprotein), which doesn't need to be oxidized to form plaque. My Lp(a) is very low as is the Lp-PLA2 (I had separately obtained from a different laboratory). My LDL Phenotype / Size measured an "A" (best) as the particle are large, not small, which is best.
Of particular note is higher RPL than normal. There are reasons that this, homocysteine, and even C-reactive protein can be elevated temporarily. I will discuss this at the end.

b) PLAC test (www.plactest.com: 877-752-2837): This company focuses solely on the Lp-PLA2 test alone. Again, *Lp-PLA2* is an enzyme that is a marker of inflamed arteries. There is more to a heart attack than just arterial blockage / narrowing. With inflammation, the inside of the arterial wall becomes weakened and more prone to rupture. This lets plaque into the bloodstream, causing a clot (thrombosis). If Lp-PLA2 is low then even if you have plaque buildup, it will be more stable (not as rupture-prone).

c) Oxidized LDL — oXLDL (Realtime Laboratories: E7500 test): contact Direct Labs at 1-800-908-000 for the E7500 test. They send the vial and return analysis instructions. There are 3 levels of measurement: <45, 45-59, and >79. Oxidized cholesterol is a measurement of a combination of the oxidized cholesterol molecule itself and the PEOs it transports along with other oxidized fatty acids. You want OxLDL as low as possible. I have moderate OxLDL and will discuss this at the end.

d) Omega-Quant (www.omegaquant.com at 800-949-0632 uses a "dried blood spot fatty acid profile" — not plasma. The values are different between the two substances. You obtain the EFA levels in the WHOLE BLOOD sample — not tissue. Regardless, it is quite useful to see your baseline level and then after proper PEO supplementation levels. Of course, my profile comes out with less omega-3 series fatty acids than they recommend — 3.8%. The company recommends at least 8%. My *LA/ALA* ratio is 28.3:1 and *GLA* is 0.3%. The *transfats* level of omega-6 is 0.4%.

Of particular note is that I have moderate OxLDL and higher RPL than normal. There are reasons that homocysteine and even C-reactive protein can be elevated temporarily, such as a common cold, extra stress, either physical or mental.

My DPA results are superb (enclosed) showing no issue with the physiologic function of my cardiovascular system.

I want to emphasize that I intentionally do NOT have a perfect diet – or a perfectly healthy life-style. I have no interest in showing that if you "do everything perfectly" and follow my recommendations then you will stay healthy. I have to show that in spite of doing a few things "not ideally," you will stay in very good cardiovascular shape.

I believe the DPA is an outstanding new clinical tool and a wonderful adjunct to blood chemistry analysis. When you couple DPA with state-of-the-art blood lipid analysis, then you will have a much more accurate assessment of your CV system.

PTG Analysis Report

MERIDIAN

Patient Information

Chart No.			
Name	Prof Peskin		
Gender	M	Age	53
Birthday	1956-04-27	Visit	2009-11-02

Diagnosis

Chief Complaint

APG B = 30 "b.a"

Analysis Data

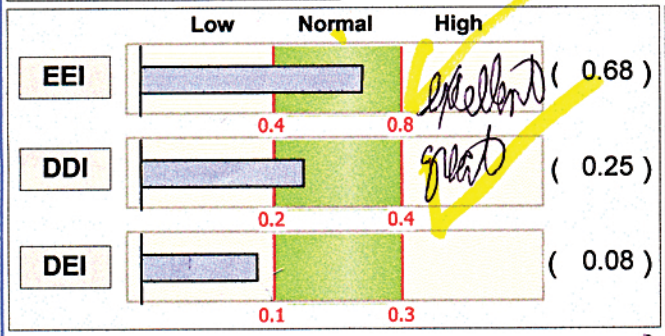
PTG Analysis

HR	69	DE I	0.08
E I	1.14	ETc	300 ms
D I	0.75	PH	7.64
EE I	0.68		
DDI	0.25		

APG Analysis

a - b	95	b / a	-0.6
a - c	135	c / a	-0.38
a - d	215	d / a	-0.19
a - e	275	e / a	0.24
		AI	-0.27

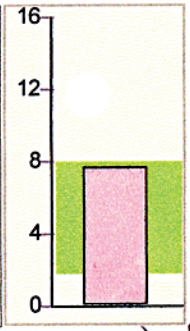
Circulation Analysis



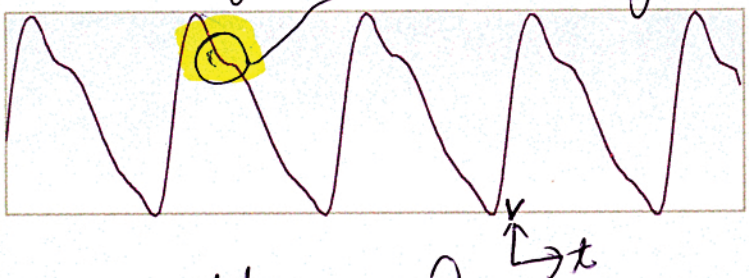
Analysis Result

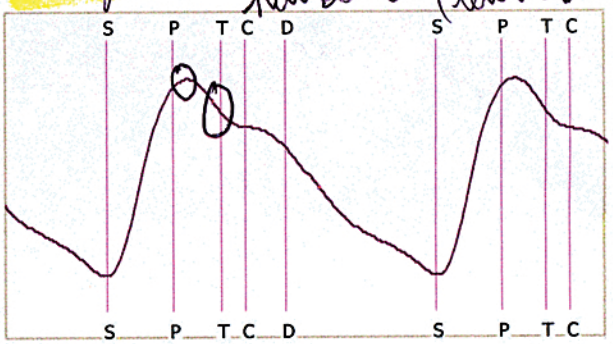
1. Recognition : 70 Pulses / 70 Pulses
2. Ejection Time : Norm (260-380)
3. Pulse Rate : Norm (65-80)
4. Pulse Height : Norm (2.0-8.0)
5. APG Type : B (54)

PH

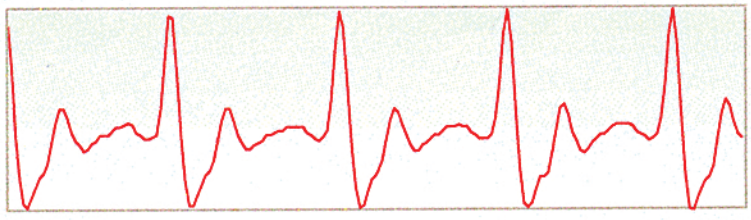


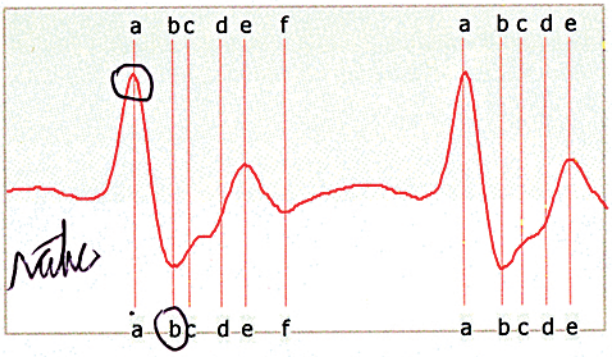
PTG





APG





"The Digital Pulse Analyzer is an information tool only. Final medical diagnosis is the sole responsibility of a licensed health care practitioner."

LPP Lipoprotein Particle Profile™

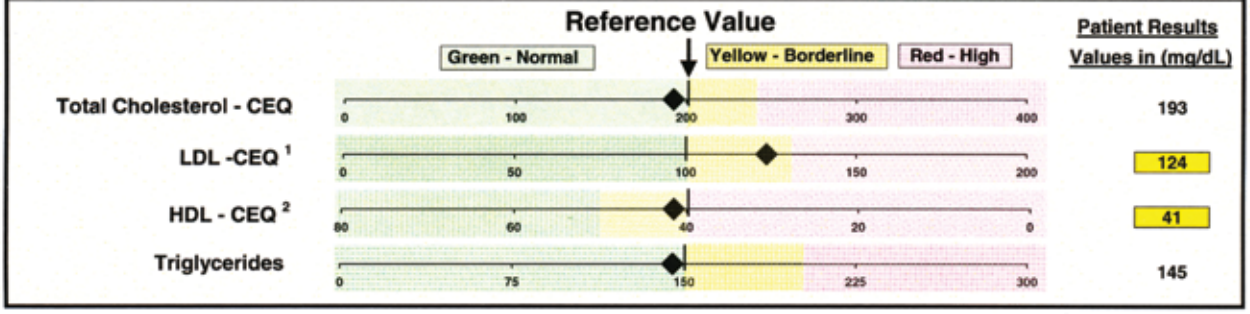
SPECTRACELL LABORATORIES
10401 Town Park Dr.
Houston, TX 77072
Laboratory Director: Jan M. Troup, Ph.D.
Tel: 713-621-3101 800-227-5227
CLIA ID 45D0710715 Fax: 713-621-3234

Requisition No: 228229
Accession No: J38226
Reference: i73\J38226.5681.5.Rpt 0.280
Name: Peskin, Brian
Draw Date: 1/5/2010
Report Date: 1/11/10 9:43 AM
Batch: B4888
Physician: Any Lab Test Now-Houston
DOB: 4/27/1956

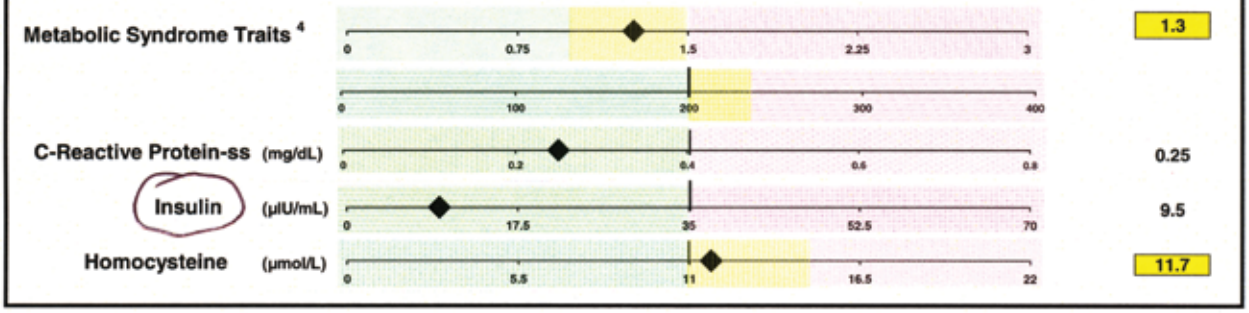
Primary Risk Assessment

Direct Lipid Panel - Lipoprotein Particle Numbers in mg of Cholesterol Equivalents (CEQ) /dL

(may not be directly comparable to lipid values from other methods)

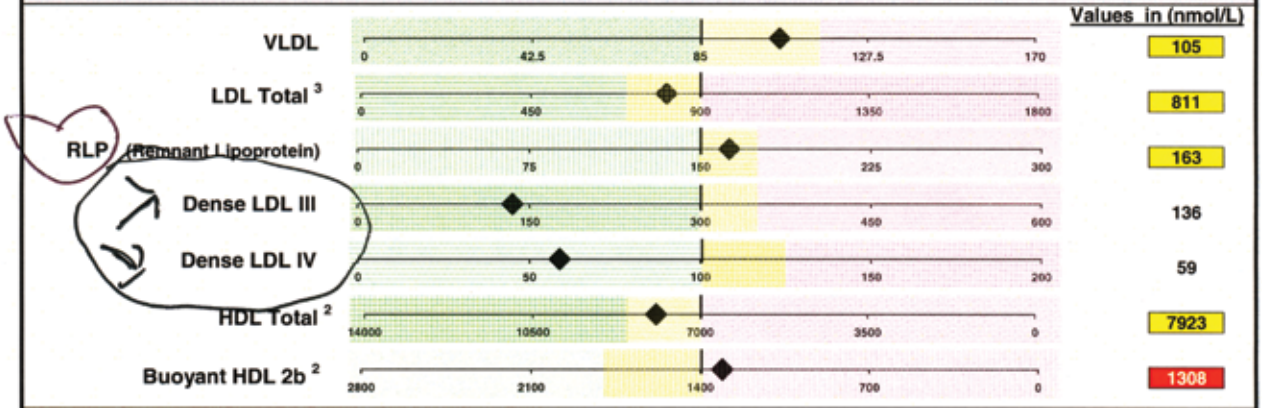


Risk Modification

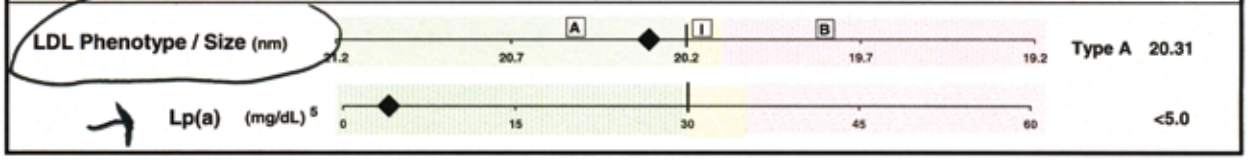


Therapeutic Approach Assessment

Lipoprotein Particle Numbers



Additional Lipoprotein Risk Factors



1. NCEP Goal for Low or Moderate Risk Patients is LDL < 130 mg/dL; for High Risk Patients is LDL < 100 mg/dL; for Very High Risk Patients is LDL < 70 mg/dL.
2. NCEP Goal for Males is HDL > 40 mg/dL (HDL particles > 7000 nmol/L) and HDL > 50 mg/dL (HDL particles > 8500 nmol/L) for Females.
   HDL2b Goal for Males is HDL2b> 1400 nmol/L and HDL2b > 1800 nmol/L for Females
3. LDL Particle Numbers Goals: Moderate Risk Patients <900 nmol/L; High Risk Patients < 700 nmol/L; Very High Risk Patients < 500 nmol/L
4. Metabolic Syndrome Diagnosis is Established with Three Traits. Add Metabolic Syndrome Traits above and Non-Lipid Traits:
   Abdominal Obesity > 40" M, 35" F; Elevated Blood Pressure >130/85 mm Hg; Fasting Glucose >100 mg/dL
5. Reference Value for Blacks is 50.0 mg/dL

LPP Lipoprotein Particle Profile℠

SPECTRACELL LABORATORIES
10401 Town Park Dr. Houston, TX 77072 Laboratory Director:
Tel: 713-621-3101 CLIA ID 45D0710715 Jan M. Troup, Ph.D.
800-227-5227 Fax: 713-621-3234

Reference: \Lab\LPP\Data\a73\J38226.5681.5. 0.280 Report Date: 1/11/10 9:43 AM

Name: **Peskin, Brian** Draw Date: January 5, 2010 DOB: April 27, 1956

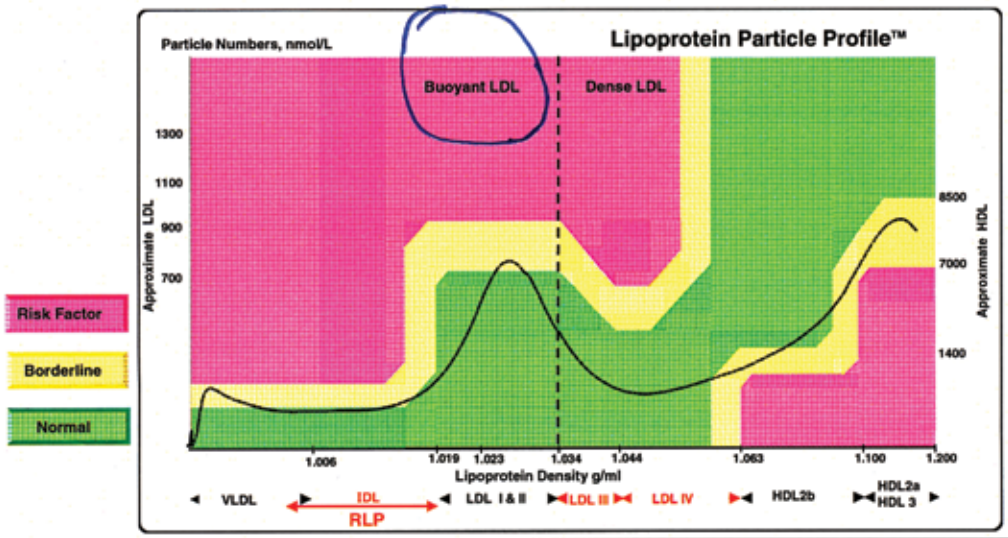
Primary Risk Assessment

Direct Lipid Panel - Lipoprotein Particle Numbers in mg of Cholesterol Equivalents (CEQ) /dL

(may not be directly comparable to lipid values from other methods)

	Value	NCEP Value	Alert (Notes Page 3)
Total Cholesterol - CEQ	193	<200	
LDL - CEQ	124	<130 [1]	Borderline High (3)
HDL - CEQ	41	>40 [2]	
Triglycerides (mg/dL)	145	<150	

Results for serum Total Cholesterol, LDL and HDL as measured in mg/dL may be different than results for Total Cholesterol, LDL and HDL as measured in mg of cholesterol equivalents/dL. Cholesterol equivalent results depend on the particle number and the cholesterol saturation of the lipoprotein particles.



Risk Modification

	Value	Reference Value	Alert (Notes Page 3)
Metabolic Syndrome Traits	1.3	0 to 3 [4]	Possible (10)
C-Reactive Protein-ss (mg/dL)	0.25	<0.40	
Insulin (uIU/mL)	9.5	<35.0	
Homocysteine (umol/L)	11.7	<11.0	Borderline High (14)

Therapeutic Approach Assessment

Lipoprotein Particle Numbers (nmol/L)

	Value	Reference Value	Alert (Notes Page 3)
VLDL	105	<85	Borderline High (15)
LDL Total	811	<900 [3]	Borderline High (16)
RLP (Remnant Lipoprotein)	163	<150	Borderline High (17)
Dense LDL III	136	<300	
Dense LDL IV	59	<100	
HDL Total	7923	>7000 [2]	Borderline-M, Low-F (20)
Buoyant HDL 2b	1308	>1400 [2]	Low (21)

Additional Lipoprotein Risk Factors

	Value	Reference Value	Alert / Phenotype
LDL Mean Size (nm) / Phenotype	20.31	>20.20	Large LDL, Type A (23)
Lp(a) (mg/dL)	<5.0	<30.0 [5]	

1. The NCEP Goal for Low or Moderate Risk Patients is LDL < 130 mg/dL; for High Risk Patients is LDL < 100 mg/dL; for Very High Risk Patients is LDL < 70 mg/dL.
2. The NCEP Goal for Males is HDL > 40 mg/dL (HDL particles > 7000 nmol/L) and HDL > 50 mg/dL (HDL particles > 8500 nmol/L) for Females. The HDL2b Goal for Males is HDL2b> 1400 nmol/L and HDL2b > 1800 nmol/L for Females
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4. Metabolic Syndrome Diagnosis is Established with Three Traits. Add Metabolic Syndrome Traits above and Non-Lipid Traits: Abdominal Obesity > 40" M, 35" F; Elevated Blood Pressure >130/85 mm Hg; Fasting Glucose >100 mg/dL
5. Reference Value for Blacks is 50.0 mg/dL.

The VAP Cholesterol Test

Personal Information	Sex: M	Date Collected: 01/26/10
Patient Name: PESKIN,BRIAN	Age: 53	Date Received: 01/27/10
Account: ANY LAB TEST NOW-WESTHIEMER TEXASDOB: 04/27/1956		Date Reported: 01/28/10
Physician:	Client No:	Accession: 6979054

Additional CVD Risk Factors	Actual	Alert	Reference Ranges
Lp-PLA$_2$	182.84		< 235 ng/mL

Note: Atherotech does not attempt to mandate or advise treatment for individual patients. The considerations are to be used along with clinical judgment and risk assessment. Final recommendations lie with the clinician.

Atherotech, Inc.
201 London Parkway
Birmingham, AL 35211

Phone: (877) 901-8510
Fax: (205) 314-7403
Lab Director: Dr. Kris Kulkarni

www.thevaptest.com

REALTIME LABORATORIES, LLC

13016 BEE STREET, SUITE 203
DALLAS, TEXAS 75234
CLIA #: 45D1051736 TAX ID #: 20-4158880
PHONE: 972-243-7754 FAX: 972-243-7759
WEBSITE: www.realtimelab.com E-MAIL: mscmd@cox.net

OXIDIZED LDL REPORT FORM

PATIENT: PESKIN, BRIAN

PATIENT DATE OF BIRTH: 04-27-1956

ACCESSION #: OX0210003

DATE OF SERVICE: 02-11-2010

PATIENT PROJECT #: OXLDL/Direct Lab

DATE OF REPORT: 03-02-2010

SAMPLE TYPE: Plasma

ORDERING PHYSICIAN: Dr. Anna Davis

PROCEDURE:

TYPE: Oxidized LDL Testing

RESULTS:

Value	Range
56	M

Risk ranges for OxLDL (U/L)
Low (L): < 45
Moderate (M): 45 - 59
High (H): 60 -79
Very High (VH): > 79
Ref: Johnston, et al. Am J Cardiol March 2006; 97: 640 - 645.

The performance characteristics (analytic performance) of this test have been validated by Shiel Medical Laboratory. It has not been cleared or approved by the US Food and Drug Administration, which has determined that such clearance and approval are not necessary.

Technician's Initials: _____

Disclaimer: "This test was developed and its performance characteristics determined by RealTime Lab. It has not been cleared or approved by the U.S. Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary. This test is used for clinical purposes. It should not be regarded as investigational or for research. This laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA-88) as qualified to perform high complexity clinical laboratory testing."

HS-Omega-3 Index®- Full Fatty Acid Profile

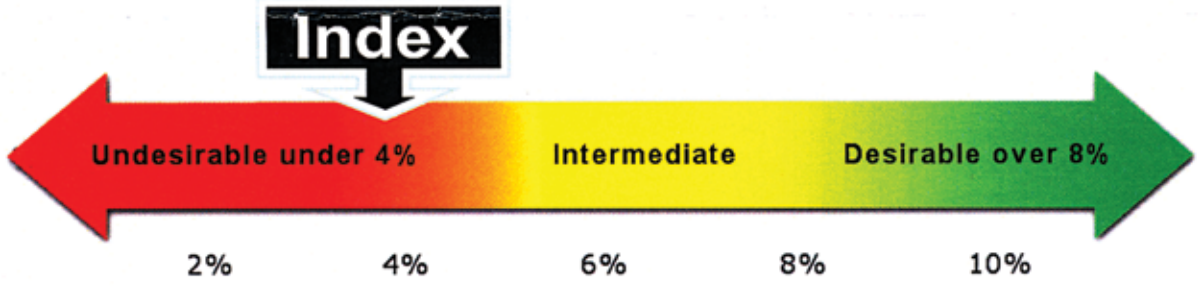
OmegaQuant Analytics
2329 N Career Ave
Suite 113
Sioux Falls, SD 57107 USA

Phone: 1-800-949-0632
Fax: 1-800-526-9873
info@omegaquant.com
www.omegaquant.com

Name: Peskin, Brian
DOB: 04/27/1956
ID: BP
Collection Date: February 09, 2010

Result Date: February 16, 2010
Provider: N/A
Account: Consumers

HS-Omega-3 Index = 3.8%



Dried Blood Spot Fatty Acid Profile

Omega-3 Fatty Acids:		Total* = 4.8	%
Alpha-Linolenic	(18:3n3)	0.7	%
Eicosapentaenoic	(EPA, 20:5n3)	0.5	%
Docosapentaenoic-n3	(22:5n3)	1.2	%
Docosahexaenoic	(DHA, 22:6n3)	2.4	%
Whole Blood EPA + DHA†		2.9	%

Omega-6 Fatty Acids:		Total* = 31.8	%
Linoleic	(18:2n6)	19.8	%
Gamma-Linolenic	(18:3n6)	0.3	%
Eicosadienoic	(20:2n6)	0.2	%
Dihomo-y-linolenic	(20:3n6)	1.6	%
Arachidonic	(AA, 20:4n6)	8.6	%
Docosatetraenoic	(22:4n6)	1.0	%
Docosapentaenoic-n6	(22:5n6)	0.3	%

Fatty Acids Ratios*	
Omega-6:Omega-3	6.6
AA:EPA	16.7

cis-Monounsaturated Fatty Acids:		Total* = 23.1	%
Palmitoleic	(16:1n7)	1.0	%
Oleic	(18:1n9)	21.8	%
Eicosenoic	(20:1n9)	0.2	%
Nervonic	(24:1n9)	0.1	%

Saturated Fatty Acids:		Total* = 38.8	%
Myristic	(14:0)	1.6	%
Palmitic	(16:0)	25.3	%
Stearic	(18:0)	11.6	%
Arachidic	(20:0)	0.1	%
Behenic	(22:0)	0.1	%
Lignoceric	(24:0)	0.1	%

Trans Fatty Acids:		Total* = 1.6	%
Trans Palmitoleic	(16:1n7t)	0.1	%
Trans Oleic	(18:1t)	1.1	%
Trans Linoleic	(18:2n6tt)	0.4	%

*Provided for reference only. Except for the HS-Omega-3 Index, there are no evidence based data from which to set norms for other fatty acids or ratios.
†The HS-Omega-3 Index is calculated from whole blood EPA+DHA by a regression equation (see FAQ section on our website).

Lab Director: Brad Randall, MD. CLIA#: 43D1105229