

Listed below are publications from peer-reviewed scientific journals on recent, relevant clinical trials and studies using The VAP Cholesterol Test.

The VAP Cholesterol Test was utilized in all listed studies, providing a valuable tool in the advancement of cardiovascular disease research.

∞ **Metabolic Syndrome, Diabetes, Endocrinology and Nutrition:**

- ◆ The VAP helped clinicians identify Metabolic Syndrome, aiding in the effort to prevent the development of clinical diabetes.
- ◆ The VAP's unparalleled accuracy helped clinicians determine and stratify risk in diabetes patients.

∞ **Cardiology, Pharmacotherapy and Vascular Medicine:**

- ◆ The VAP helped clinicians pinpoint the patients that will best benefit from combination therapy.
- ◆ The VAP test identified residual risk in high risk patients.

∞ **Ethnic and Gender Specific Medicine:**

- ◆ The VAP identified components which stratify risk in women and various ethnic groups.

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## METABOLIC SYNDROME, ENDOCRINOLOGY, DIABETES AND NUTRITION

Marso SP, Mehta SK, Kulkarni KR, *et al.* Low adiponectin levels are associated with atherogenic dyslipidemia and lipid – rich plaque in non-diabetic coronary arteries. **Diabetes Care** (accepted for publication)

Chang C, Grundy SM, Vega GL, *et al.* **Metabolic syndrome phenotype in very obese women. Metabolic Syndrome and Related Disorders** (*Metab Syndr Relat Disord*; 2007;5(1):3-12)

Farin HMF, Abbasi F, Reaven GM, *et al.* The relationship between insulin resistance and dyslipidemia in cigarette smokers. **Diabetes, Obesity and Metabolism** (*Diabetes Obes Metab* 2007; 9:65-69)

Pinhas-Hamiel O, Lerner-Geva L, Jacobson MS, *et al.* Lipid and insulin levels in obese children: changes with age and puberty. **Obesity** (*Obesity* 2007; 15(11):2825-2831)

St-Onge MP, Newcomer BR, Buchthal S, *et al.* Intramyocellular lipid content is lower with a low-

fat diet than with high-fat diets, but that may not be relevant for health. **American Journal of Clinical Nutrition** (*Am J Clin Nutr* 2007;86:1316-1322)

McLaughlin T, Abbasi F, Reaven GM, *et al.* Clinical efficacy of two hypocaloric diets that vary in overweight patients with type 2 diabetes. Comparison of moderate fat versus carbohydrate reductions. **Diabetes Care** (*Diabetes Care* 2007; 30(7):1877-1879).

McLaughlin T, Abbasi F, Reaven GM, *et al.* Effects of moderate variations in macronutrient compositions on weight loss and reduction in cardiovascular disease risk in obese, insulin-resistant adults. **American Journal of Clinical Nutrition** (*Am J Clin Nutr* 2006; 84: 813-821)

Miller M, Dobs A, Yuan Z, *et al.* The effect of simvastatin on triglyceride-rich lipoproteins in patients with type 2 diabetic dyslipidemia: A SILHOUETTE trial sub-study. **Current Medical Research and Opinion** (*Cur Med Res Opin* 2006; 22(2) 343-350)

Chu JW, Kulkarni KR, Reaven GM, *et al.* Multiple lipoprotein abnormalities associated with insulin resistance in healthy volunteers are identified by the Vertical Auto Profile–II methodology. **Clinical Chemistry** (*Clin Chem* 2003; 49(6) 1014-1017)

Toolbert DJ, Glasgow RE, Strycker LA, *et al.* Biologic and quality-of-life outcomes from the Mediterranean lifestyle program. **Diabetes Care** (*Diabetes Care* 2003; 26: 2288-2293)

Krauss WE, Houmard JA, Kulkarni KR, *et al.* Effects of the amount and intensity of exercise on plasma lipoproteins. **The New England Journal of Medicine** (*N Engl J Med* 2002;347:1483-1492)

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## CARDIOLOGY, PHARMACOTHERAPY AND VASCULAR MEDICINE

Sailam V, Karalis D, Agarwal A, *et al.*; Prevalence of Emerging Cardiovascular Risk Factors in Younger Individuals with a family history of premature coronary heart disease and low Framingham risk score. **Clinical Cardiology** (*Clin Cardiol* 2008; 31, 11, 542-545)

May HT, Pearson RP, Horne BD *et al.* Comparison of effects of simvastatin alone versus simvastatin plus fenofibrate on lipoprotein subparticle profiles in diabetic patients with mixed dyslipidemia (From the diabetes and combined lipid therapy regimen study) **The American Journal of Cardiology** (*Am J Cardiol* 2008; 101:486-489)

Farnier M, Perevozskaya I, Taggart W, *et al.* VAP-II analysis of lipoprotein subclasses in mixed hyperlipidemic patients on treatment with ezetimibe/simvastatin and fenofibrate. **Journal of Lipid Research** (published online ahead of print July 31, 2008)

Tribble D, Farnier M, Macdonell G, *et al.* Effects of fenofibrate and ezetimibe, both as monotherapy and in coadministration, on cholesterol mass within lipoprotein subfractions and low-density lipoprotein peak particle size in patients with mixed hyperlipidemia. **Metabolism** (*Metabolism* 2008; 57:796-801)

Aiyer AN, Kip KE, Marroquin O, *et al.* Racial differences in coronary artery calcification are not attributed to difference in lipoprotein particle sizes: The heart strategies concentrating on risk evaluation (Heart SCORE) study. **American Heart Journal** (*Am Heart J* 2007;153:328-334)

Farnier M, Roth E, Gil-extremera G, *et al.* Efficacy and safety of the coadministration of ezetimibe/simvastatin with fenofibrate in patients with mixed hyperlipidemia. **American Heart Journal** (*Am Heart J* 2007; 153:335.e1-335.e8)

Davidson MH, Smith J, Scott R *et al.* Assessment of lipoprotein profiles study (ALPS) and antioxidant activity in healthy subjects treated with AGI-1067. **Journal of Clinical Lipidology** (*J Clin Lipid* 2007; 1(4): 271-279)

Ose L, Reyes R, Johnson-Levonos AO, *et al.* Effects of ezetimibe/simvastatin on lipoprotein subfractions in patients with primary hypercholesterolemia: An exploratory analysis of archived samples using two commercially available techniques. **Clinical Therapeutics** (*Clin Ther* 2007; 29:2419-2432)

Karalis DG, Ishisaka DY, Wun, CC, *et al.* Effects of increasing doses of atorvastatin on the atherogenic lipid subclasses commonly associated with hypertriglyceridemia. **American Journal of Cardiology** (*Am J Cardiol* 2007;100:445-449)

St-Onge MP, Aban I, Bosarge A, *et al.* Snack chips fried in corn oil alleviate cardiovascular disease risk factors when substituted for low-fat or high-fat snacks. **American Journal of Clinical Nutrition** (*Am J Clin Nutr* 2007;85:1503-10)

Harper CR, Edwards MC, Jacobson TA. Flaxseed oil supplementation does not affect plasma lipoprotein concentration or particle size in human subjects. **Journal of Nutrition** (*Nutrition* 2006;136:2844-2848)

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# CLINICAL STUDIES USING THE VAP CHOLESTEROL TEST



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## CARDIOLOGY, PHARMACOTHERAPY AND VASCULAR MEDICINE (continued)

Brook RD, Kansal M, Rubenfire M *et al.* Usefulness of low-density lipoprotein particle size measurement in cardiovascular disease prevention. **Clinical Cardiology** (*Clin Cardiol* 2005;28:534-537)

Desai MY, Rodriguez A, Lima JAC *et al.* Association of cholesterol subfractions and carotid lipid core measured by MRI. **Arteriosclerosis Thrombosis, and Vascular Biology** (*Arterioscler Thromb Vasc Biol*; 2005;25:e110-e111)

Grundy SM, Vega GL, Palmisano J, *et al.* Effectiveness and tolerability of simvastatin plus fenofibrate for combined hyperlipidemia (The SAFARI Trial). **American Journal of Cardiology** (*Am J Cardiol* 2005;95:462-468)

Engler MM, Engler MB, Kulkarni KR *et al.* Effect of docosahexaenoic acid on lipoprotein subclasses in hyperlipidemic children (The EARLY study) **American Journal of Cardiology** (*Am J Cardiol* 2005;95:869-871)

Maki KC, Van Elswyk ME, McCarthy D, *et al.* Lipid Responses to a dietary docosahexaenoic acid supplement in men and women with below average levels of high density lipoprotein cholesterol. **Journal of the American College of Nutrition** (*J Am Coll Nutr* 2005;24:189-199)

Rembold CM, Rembold KE, Ayers CR *et al.* Effectiveness of multiple antilipidemic agents on Vertical Auto Profile II guided treatment of dyslipoproteinemia. **American Journal of Cardiology** (*Am J Cardiol* 2002;90:887-890)

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## ETHNIC AND GENDER SPECIFIC MEDICINE

Mulukutla SR, Venkitachalam L, Marroquin OC *et al.* Population variations in Atherogenic Dyslipidemia: A report from the HeartSCORE and IndiaSCORE studies. **Journal of Clinical Lipidology** (*J Clin Lipid* 2008; 2(6): 410-417)

Giger JN, Strickland OL, Acton RT *et al.* Genetic predictors of coronary heart disease risk factors in premenopausal African-American women. **Ethnicity & Disease** (*Ethn Dis* 2005; 15:221-232)

Reaven GM, Kulkarni KR, Segrest JP *et al.* Insulin resistance, dietary cholesterol, and cholesterol concentration in postmenopausal women. **Metabolism** (*Metabolism* 2001; 50(5):594-597)

Meki KC, Davidson MH, Cyrowski MS, *et al.* Low-density lipoprotein subclass distribution pattern and adiposity-associated dyslipidemia in postmenopausal women. **Journal of the American College of Nutrition** (*J Am Coll Nutr* 2000; 19(1)23-30)

Kulkarni KR, Markovitz JH, Segrest, JP *et al.* Increased prevalence of smaller and denser LDL particles in Asian Indians. **Arteriosclerosis Thrombosis and Vascular Biology** (*Arterioscler Thromb Vasc Biol* 1999;19:2749-2755)

Markovitz JH, Kulkarni KR, Nanda, N *et al.* Increased platelet activation and fibrinogen in Asian Indians: potential implications for coronary risk. **European Heart Journal** (*Eur Heart J* (1998) 19, 720-726)(This article was accompanied by an editorial).

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## OTHER DISEASE RESEARCH

Janiszewski PM, Oeffinger KC, Church TS, *et al.* Abdominal obesity, liver fat and muscle composition in survivors of childhood acute lymphoblastic leukemia. **The Journal of Clinical Endocrinology & Metabolism** (*J Clin Endocrinol Metab* 2007; 92: 3816-3821)

Beatty G, Kulkarni KR, Reaven GM, *et al.* Relative effects of insulin resistance and protease inhibitor treatment on lipid and lipoprotein metabolism in HIV-Infected patients. **HIV Clinical Trials** (*HIV Clin Trials* 2004;5(6)383-391)

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## ORIGINAL METHODOLOGY PAPERS

Kulkarni KR, Marcovina SM, Segrest JP, *et al.* Quantification of HDL2 and HDL3 cholesterol by the Vertical Auto Profile-II (VAP-II) Methodology. **Journal of Lipid Research** (*J Lipid Res* 1997, 38: 2353-2364)

Kulkarni KR, Garber DW, Segrest JP, *et al.* Identification and cholesterol quantification of low density lipoprotein subclasses in young adults by VAP-II Methodology. **Journal of Lipid Research** (*J Lipid Res* 1995, 36:2291-2302)

Kulkarni KR, Marcovina SM, Segrest JP, *et al.* Quantification of Cholesterol in all lipoprotein classes by the VAP-II Method. **Journal of Lipid Research** (*J Lipid Res* 1994, 35:159-168)

Kulkarni KR, Marcovina SM, Segrest JP, *et al.* Analysis for cholesterol in all lipoprotein classes by single vertical ultracentrifugation of fingerstick blood and controlled-dispersion flow analysis. **Clinical Chemistry** (*Clin Chem* 1992; 38(9):1896-1905)